

MANUFACTURERS' RECORD.

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER.

VOL. XXIX. No. 22.
WEEKLY.

BALTIMORE, JUNE 26, 1896.

\$4.00 A YEAR.
SINGLE COPIES, 10 CENTS.

Manufacturers' Record.

PUBLISHED EVERY FRIDAY BY THE
Manufacturers' Record Publishing Co.

RICHARD H. EDMONDS, President.
WM. H. EDMONDS,
Secretary and Treasurer.

OFFICE: MANUFACTURERS' RECORD BUILDING,
BALTIMORE.

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NEW ENGLAND OFFICE—John Hancock Building,
178 Devonshire Street, Boston, Mass.
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BALTIMORE, JUNE 26, 1896.

The Manufacturers' Record will shortly open an office in New York, in charge of Mr. C. R. Marchant, of the business department of the paper.

It is understood that the North German Lloyd Steamship Co., which has determined to extend its service between Bremen and Galveston, will at first have semi-monthly sailings from each port. The first vessel will be the Crefeld, which will leave Bremen about September 20 for Galveston. The other ships will be the Bonn, the Aachen, the Halle, the Roland and the Wittekind. They range from 3700 to 5000 tons each. Several of the vessels have been built but a few years, and have accommodations for passengers as well as freight.

Mr. Sol Haas, for many years actively identified with Southern railroad affairs, has been elected president of the Sloss Iron & Steel Co., of Birmingham, to succeed the late Thomas Seddon. The Manufacturers' Record believes that a good selection has been made, and that under Mr. Haas's management this great enterprise will go on broadening its operations on the solid foundation laid by its late president. It is a matter of congratulation that Alabama's great interests find no lack of strong men for their management when changes made necessary by death or other causes are brought about. The long sickness and death of President Caldwell, of the Elyton Company, of Birmingham, brought to the presidency of that company last year Mr. J. K. McDonald, under whose direction this company seems again destined to become a powerful factor in the upbuilding of that city. In Mobile the Commercial Club has lately been fortunate enough to secure Mr. Murray Wheeler as president. Mr. Wheeler is engaged in large shipping interests, and his identification with the Commercial Club will make it possible for him to take steps to bring Mobile prominently before the country. In other Alabama cities similar changes have been going on, and though some of the great leaders of the industrial upbuilding are

passing away, others are coming to the front, determined that Alabama shall not lag behind in the march of progress.

Against Unnecessary Political Excitement.

The people of the United States are its sovereign rulers. They select their servants and expect them to obey their orders. Once in four years they decide who shall be their chief servant and place him at the head of their affairs. Every two years they send other servants to the House of Representatives at Washington to make the laws they think they need for their betterment. But primarily the power of our system is vested in the great body of the people.

The country will soon be in the throes of another national election. The people's chief magistrate and the members of the lower house of Congress are to be chosen next November. For two months before the fateful day comes the country will ring with the harangues of the partisan orators, and party papers will teem with discussions of the questions at issue. Then the votes will be cast, the decision announced, and every person will assent to the decision and go about his own business, leaving the public business to the public servants to whom for the time being the people have entrusted their affairs. This it is to have "a government of the people, by the people and for the people."

As our presidential campaigns have been conducted for many years, there has been an immense waste of valuable time. The aggregate of loss of days' work every four years, if computed, would amount to an enormous sum. The collective cost of brass bands, marching organizations, barbecues and public entertainments of all sorts in connection with the campaign would reach an astonishing figure if it could be computed. And what gain comes from all this loss of time and expenditure? Just none at all. It is all a foolish waste. It changes no voter's mind. It makes no difference in the result. The people know what they want, and would vote for the candidates that they thought would best serve them if all this flummery were omitted.

Why may not the South this year set a sensible example to the rest of the country, and show it how a presidential canvass can be made without all this nonsense, which pleases only the unthinking rabble, but which disgusts practical business men?

There must be public discussions, say the politicians. Well and good. Have them at the cross-roads, in the villages, towns and cities, or wherever men find it most convenient to congregate, but let them be genuine discussions of vital issues, and free from all sorts of political claptrap. We know of a certainty that great numbers of the sterling business men of the country are averse to the practices that have been long in vogue, and believe that they should

give place to some other more sensible methods. They deplore the fact that once in four years the business of the country suffers because of the, for the most part, manufactured political excitement that attends a presidential election. They think, and reasonably, that we should have better legislation and a better national administration, as a general rule, if our elections were conducted on other lines and by other methods than those that have been long in vogue. The country would be blessed with more genuine statesmen, and would be relieved of the ever-enlarging host of political demagogues if this reform could be made. The conservative South could lead off in such a reform, to her own great betterment and to the benefit of the country.

Increasing Facilities for Handling Galveston's Grain Trade.

The greatly increasing grain trade of Galveston, Texas, has demanded that extensive improvements be made at that port for the proper handling of it. The initial step has already been taken for affording better facilities, the Galveston Wharf Co. having decided to erect two elevators. One will have a capacity of 500,000 bushels; the other will have a capacity of 100,000 bushels. The former will be used for the ordinary handling of grain; the latter will be used for the purpose of cleaning and conditioning such grain as may reach Galveston in unmerchantable condition and making it marketable. The latter elevator will be erected as quickly as possible. The two elevators will represent an outlay of from \$150,000 to \$200,000, and will increase the Wharf Company's elevator capacity to 1,600,000 bushels and the port's elevator capacity to 2,000,000 bushels. The Wharf Company already has assurances from large exporters of grain that they intend to move a large quantity of grain through this port the coming seasons, having recently received a letter from a large grain-exporting firm of St. Louis that they were in the market to buy wheat in large quantities for export through Galveston, and asking if the Wharf Company was in a position to handle the business cheaply and expeditiously. This grain firm handled last season over 3,000,000 bushels of corn through Galveston. This movement looking to the enlargement of Galveston's grain trade indicates the growing position of Southern ports in the world's commercial affairs.

The building committee of the new insane asylum to be built by the State of Maryland have decided not to advertise for bids, and thus not to invite any general competition, or, as put by the architects in a letter to the Manufacturers' Record: "The bids for the new insane asylum are by invitation of the building committee, and not in general competition." It will be an interesting question as to who shall decide upon the list of favored contractors who are to have the privilege of bidding on this extensive structure.

The National Association of Manufacturers.

In order to awaken the interest of Southern manufacturers in the work of the National Association of Manufacturers, President Search has appointed J. M. Lane as a general agent of the association for the Southern States. Mr. Lane has already started upon a tour of the Southern States, beginning with Maryland, and he will visit the vice-presidents of the association in the different States to confer with them and to assist them in every way possible in extending the membership and influence of the association. The National Association of Manufacturers has a strong list of Southern vice-presidents in Mr. David S. Bartlett, of Bartlett, Hayward & Co., of Baltimore; Mr. D. A. Tompkins, of Charlotte, N. C.; Mr. Ellison A. Smyth, president of the Pelzer Manufacturing Co., of Pelzer, S. C.; Mr. C. D. Mitchell, of the Chattanooga Plow Co., of Chattanooga, Tenn.; Mr. J. F. Hanson, of the Bibb Manufacturing Co., of Macon, Ga.; Mr. John Dymond, of New Orleans; Mr. John A. Lewis, of the Mississippi Cotton Oil Co., of Meridian, Miss.; and Mr. W. C. Nones, of the Kentucky Wagon Manufacturing Co., of Louisville, Ky. With such an official representation among the Southern States the National Association of Manufacturers ought to have a large following of members in every branch of Southern industry.

It is the evident determination of the present management of the National Association of Manufacturers to make that organization a national body in all that the word implies, without any distinction between localities or political parties. There is so much that the manufacturers of the South can gain from alliance with this powerful business organization that it is hoped that they will meet Mr. Lane cordially and give careful consideration to the cause he represents. This is a business movement which commands attention from every business man who is far-sighted enough to perceive the importance of united action in all matters which affect his interests.

Charlotte's Varied Industries.

The number and diversity of its manufacturing interests have made Charlotte, N. C., one of the most flourishing communities in the country. The Observer, in a recent article, points out what has been accomplished by the manufacturers of that city, aided by the business men generally, in developing its trade interests. The city has increased in population over 8000 within five years, the total now being 20,000. There are twenty-five different kinds of industries carried on, textile manufacturing predominating. Over \$3,500,000 are invested in industries, which include six cotton mills, a hosiery mill, a towel and sash-cord factory, a bolting and flour mill, two cotton-oil mills, a fertilizer works, four machine shops, three foundries, three clothing factories, two belting factories and a num-

ber of miscellaneous plants. Located on two of the principal railroad systems of the South, the Southern and the Seaboard Air Line, the city has excellent transportation facilities. It has five banks, with a capital and surplus of about \$1,300,000. The principal buildings include a modern postoffice, twenty-eight churches, many of them new; a United States assay office, where over \$250,000 worth of ores were assayed during the past year. Although the city has most of the modern improvements, such as paving, etc., the present debt is only \$175,000, and the tax rate but \$1.07 on \$100. The sales of merchandise in the city are over \$5,000,000 per year. Building and loan associations are an active factor in assisting in various improvements, the capital invested in these organizations being about \$625,000.

Heads I Win; Tails You Lose.

The Philadelphia Daily Record, an ardent advocate for gold and a bitter enemy to protection, in a late editorial presents a view of the political situation that has at least one cheering feature to those who believe in a protective tariff. The Record claims that protection and free silver logically go together. The Record says:

A political alignment for protection and the gold standard against a low tariff and free silver would have one advantage which the contributors to campaign funds would not be slow to discover. Free silver and protection belong together, and cannot be divorced by any dictum of a political platform. The incongruous linking of the high-tariff policy and the gold standard on the one side against free silver and a revenue tariff on the other would afford an opportunity for the bounty-fed industries to contemplate the possible issue of the coming political campaign with greater complacency than they have been able to exhibit in any Presidential contest since the close of the war. They would be assured in advance that, whatever party should win, their cause would prosper.

The success of the McKinleyites on any platform regarding the currency would mean a readjustment of the tariff to suit the demands of the manufacturers. On the other hand, if the democrats should be foolish enough to embrace the silver idol their success at the polls would send gold to a premium; and a premium on gold would be equivalent to so much additional duty on foreign imports.

According to the Record, the success of Mr. McKinley would insure full protection, and the success of free silver would, by the difference in exchange, also result in higher protection, which is the effect of the silver basis of currency in Mexico and Japan. Manufacturers who believe in protection ought, according to this reasoning, feel entirely safe for the next four years in the assurance of a good protective tariff, regardless of which side wins. There is, at least, some satisfaction in being able to feel that "heads I win, tails you lose;" and in this light manufacturers ought to be able to rest a little easier than any other class, because they are probably the only people who will get, in part, at least, just what they want, no matter which side wins.

Henry A. Lozier, of Cleveland, Ohio, who is the head of the concern which manufactures the Cleveland bicycle, at Toledo, Ohio, is building a very large mill at Greenville, Pa., for the manufacture of seamless drawn tubing. The first of these buildings, which is now being erected, will cover three acres of ground. It is expected that the company will, when in operation, employ about 500 men. As an inducement to Mr. Lozier to build at Greenville, the citizens of that town gave him ten acres of land and a bonus of \$40,000.—Iron Age.

In this we find an illustration of how Pennsylvania towns value new manufacturing enterprises. Here is a concern to employ 500 hands receiving a cash bonus of \$40,000 and ten acres of

ground. The South has had an unfortunate experience with some broken-down companies that secured large bonuses for removal to that section, but this was due to bad management on the part of the Southern people. It was their place to thoroughly investigate before making contracts. Pennsylvania towns are now striving vigorously to secure new factories, and they are offering the most liberal inducements—sometimes in the way of a bonus and sometimes through stock subscriptions. The South must awaken to a realization of the value of such methods, and it must see that a wise liberality is essential to success. Active, progressive work, persistent efforts to draw factories, men and money, liberal advertising and broad-gauged action, are all necessary in the great work of developing this section. We can afford to take some lessons from Greenville and other Pennsylvania towns.

A Suggestion to Manufacturers

A correspondent suggests in this issue the opportunity presented to large manufacturing enterprises for profitable operations in securing tracts of land and building mills to give employment to many hands, holding the exclusive ownership of the land for some years. The plan as outlined presents the possibility of capitalists investing their money in good enterprises, and not only reaping the profits arising from the business, but also securing the great enhancement in the value of land as the industrial enterprises expand. In this connection an article in the Boston Commercial Bulletin, showing the result of such a policy pursued by the Amoskeag Manufacturing Co., one of the largest enterprises of New England, is of interest. The Bulletin says:

The Amoskeag has not been called upon to make any stock assessments for years, although it has built and enlarged several mills. The income from its original land purchase has been sufficiently ample to do this.

Today, although having parted with a major portion of its land, the increased value of the remaining portion, small as it is, is worth as much now as its holdings have been at any time in its history. Land which cost the company a few cents per acre is today worth fifteen cents to \$2 per square foot; so that the Amoskeag Company can continue to sell land and build mills for some years to come from land sales alone, allowing there is no money in manufacturing cloth.

Where is the corporation in the country which can show a like record for the cost of the plant?

Then, again, the company has a claim (mortgage) upon very much of the land originally held. The owners, especially of recent purchases, bought the land, making a single payment, the company allowing the balance to remain on 6 per cent. interest, so that the land sold is paying a good percentage.

Furthermore, the Amoskeag derives a good revenue from its water-power, which it leases to other corporations; so, taken all in all, the cost of its enormous plant stands at a conservative figure. The annual rental derived is very large. A reason advanced for the decline in the stock is that the company, since the death of its former selling agents, has been doing business on its former excellent record, and it is today piling up its product, which is already large, with the prospect not at all flattering for the class of goods being made.

The Southern States magazine is read by thousands of farmers, fruit-growers, stock-raisers and business men in all the North, West and Northwest, who are looking to the South as a future home and are trying to inform themselves as to the relative advantages of different parts of the South. If you have farm, garden or orchard property for sale the Southern States will put you into communication with buyers. Send for sample copy and rates. Manufacturers' Record Publishing Co., Baltimore, Md.; Wm. H. Edmunds, editor and manager.

Two Letters Well Worth Reading.

CHARLES MUNSON BELTING CO.,
Pure Oak-Tanned Leather Belting.

New Orleans, La., June 20.

Editor Manufacturers' Record:

We feel that it is no more than justice that we should say to you that the "pointers" which we have received from your journal have aided us in the way of obtaining some orders and a great many inquiries during the months that have passed since we have been advertising in the Manufacturers' Record. Trade with us this month has been good. We have obtained a contract for belting up the new plant of Latcher & Moore, of Latcher, La., which is considered to be one of the very largest in the South, and also have belted up several smaller concerns, besides receiving orders for several 24 and 30-inch belts.

Yours very respectfully,

CHARLES MUNSON BELTING CO.

WALKER & ELLIOTT,

Manufacturers of

Fertilizer Mill Machinery.

Wilmington, Del., June 22.

Editor Manufacturers' Record:

We have done a large business South for a number of years, and all of it has been of the most satisfactory character. We lost comparatively no money there during the panic of 1893, and our collections have been most satisfactory during the dull times since. We think the South is destined to be the coming part of our country, and it has our best wishes for its success, and our most kindly regard and respect for the character of its people.

Yours very truly,

WALKER & ELLIOTT.

Extracts from Letters to Manufacturers' Record.

W. W. Woodruff & Co., Knoxville, Tenn.: "The jobbing hardware business at this season of the year is very quiet, but this is nothing more than we expect, as this is the dulllest month the hardware jobber has in this section. We look forward to better times, and, with our abundant crops, see no reason why at Knoxville we will not have our share of trade."

G. C. Anderson, Jackson, Tenn.: "A contract has just been let for an electric street railway and power-house, to furnish both incandescent and arc lights, at a cost of \$100,000, work to be completed by November 1. Our water-works plant is being increased by a 3,000,000-gallon high-duty pumping engine, now being put in by the Snow Steam Pump Works, of Buffalo, N. Y. The outlook is promising for a very busy summer, and the present crops indicate a large fall business."

The Knoxville Brick Co., Knoxville, Tenn., in a letter to the Manufacturers' Record, says: "We are adding new machinery to our plant at Powell's Station, Tenn., and are just now putting in a Chambers brick machine to be used in working shale into vitrified paving bricks. We have bought 135 acres of land at Peck's Siding, a few miles from Clinton, Tenn., which contains an immense deposit of a shale from which we expect to make most excellent roadway pavers, judging from the tests obtained by us from the material before purchasing the land. We make common building bricks, dry-pressed front bricks and ornamental bricks, our capacity being 135,000 bricks per day of ten hours. We employ from 150 to 175 hands."

The Mobile Bureau of Freight and Transportation has elected J. B. Davis, president, and R. F. Nevell, secretary and treasurer. E. E. England is manager of the bureau.

What Is Most Needed to Bring About Greater Prosperity for the General Industrial Interests of the Entire Country?

Replies to the foregoing question, recently addressed to manufacturers, are still coming in. This week we give the following:

H. L. Story, vice-president for California National Association of Manufacturers of the United States of America, Altadena, Cal.: "Your request for my views on the great question of the day has but just reached me. I will state, however, briefly, my ideas on the subject. 1. Protection to all our manufacturing interests, as well as on all products of the soil that can be successfully produced within the boundaries of our country. 2. Government aid in the construction of international waterways, the most important of which is the Nicaragua canal. 3. Proper congressional legislation to prevent flooding the country with cheap Oriental manufactured articles. 4. Reciprocity with many nations where at present we have little or no trade relations. 5. The establishment of a bureau of manufactures and commerce by the national government. 6. I do not favor the free coinage of silver at the ratio of 16 to 1, but that our general government should bring to bear every possible influence to induce England, Germany and France to join us in an international conference for the purpose of establishing a ratio which would be binding to all."

R. H. Keith, president Central Coal & Coke Co., Kansas City, Mo.: "Replying to your question of the 27th ult., as to 'What is most needed to bring about greater prosperity for the general industrial interests of the entire country?' would say that, in my opinion, the most important move needed at the present time is a final and lasting settlement of the gold and silver question. I believe the government should maintain a gold standard, at least until two standards (gold and silver) can be agreed upon by all nations. It is utterly impossible for this country to stand alone, and the sooner the world understands that we intend to maintain our credit upon the basis of gold, the better it is going to be for all the interests of the country, not only industrial, but agricultural. This settled, I think the next move the government should make would be to get out of the banking business and let the people do their own financing. Import duties should be placed so as to provide sufficient funds for all the needs of the government, in such a way as not to injure the manufacturers more than can be helped. I do not believe in protection by tariff or subsidies for the benefit of manufacturers or products."

Geo. W. Atherton, president Pennsylvania State College, State College, Centre county, Pa.: "Your letter of April 27 has been lying on my desk unanswered because I have not felt able to turn aside from other pressing matters to attempt to answer in brief so important an inquiry as 'What is most needed to bring about greater prosperity for the general industrial interests of the entire country?' To state my views in the fewest possible words, I should say: 1. An economic system that will insure ample revenue for the current maintenance of the government, with provision for a gradual extinguishment of the national debt, and a small but safe surplus for emergencies. 2. A monetary system based upon the recognized standard of the civilized world, harmonious and interchangeable in all its parts. 3. The acceptance of some economic system, even if not ideally the best, which shall give to the business in-

terests of the country a sense of stability and security against frequent or capricious change. 4. A rigid restriction of undesirable immigration. 5. A broad and statesmanlike treatment of the labor problem, as one of the necessary and desirable factors in the evolution of our system of political institutions."

Hill Bros., dealers in lumber, logs, etc., Kendall, W. Va.: "Replying to your request of some weeks ago, we send the following as the causes and remedies for present condition of the country: Causes: 1. Insufficient volume of money; 2. Monopolization of all the resources of wealth; 3. A 'corner' on the money of the country, which enables usurers and speculators in finance to control the labor and wealth of the whole country; in short, a 'monopoly of money.' Remedies: 1. More money; 2. Abolition of corporate control of the people's money; 3. Issue the money directly to the people at a low rate of interest; 4. Free coinage of silver; 5. Increase of circulating medium of the country to a sufficient volume to transact the business of the country on a cash basis, and thereby abolish all opportunity for speculation in money and high rates of interest. We would increase the circulating medium to \$50 per capita."

F. G. Anderson, Jamestown, N. Y.: "Greater prosperity for the general industrial interests of the entire country can be had only when each and every one willing and able to work can find suitable work at fair remuneration, as then, and then only, can an effective demand for goods and services be commensurate with available supply. And this can quickly and easily be accomplished by exempting business and labor products from taxation and laying all taxes on the site-value of land, thus entirely ignoring, for purposes of taxation, all the improvements of, on or in the land. All land would then be put to its proper use as far as needed, and no business, enterprise or thrift would be hampered or fined by taxation. Thus all would be employed at suitable vocations, earning money, which would be spent for labor products produced by manufacturers or farmers. When all earn money all can and will spend money. When money can be and freely is spent by all for manufactured articles, then, and not until then, will manufacturers, merchants and farmers, as well as workmen and professional men, prosper. The best way, then, to encourage manufacturing and all business is to free the great mass of people, who constitute the bulk of our merchants (who are the direct customers of our manufacturers) and farmers' customers, i. e., the workingmen, from enforced idleness. And when we entirely free improvements, industry and production, and their fruits, from taxation, and encourage the use of land, and frown upon and, as it were, fine or discourage the withholding of land from its proper use, we will have done it. Many other things may be of use to do; many other reforms might, perchance, be wise to adopt; but land and taxation reforms are the fundamental reforms to 'go for,' as without these none else will be of any lasting avail. Land speculation, and the taxation of industry and its promoters and the products of industry, are too great burdens or curses to allow of any considerable prosperity for any length of time. Therefore, let our slogan be: 'No taxes to check, discourage and fine business and labor, and no withholding from use of land needed or wanted for its proper use; no higher taxes for those putting their land to its very best use than for those who hold land of equal site-value out of use or from its best use.'"

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Boom Towns.

Such towns are not impossibilities in the future, but in nearly every case where one is successful it will not be the offspring of visionary promoters—men either with but small capital or none at all, who may secure by purchase or otherwise large tracts of land, have it surveyed and mapped on paper, get up cuts that represent buildings not in existence and never to be, erect light plants, poles and wires with flashing electric lights scattered through bushes and underbrush to frighten the coons, or start a hotel never to be completed or opened for the reception of guests—such monuments of folly may be met with both North and South—monuments to the memory of speculative and adventurous spirits, a class unfortunately too common in both sections, and the wonder often is, when viewing the wrecks of such speculative attempts, where the "suckers" came from who advanced the funds to begin the attempt of boosting such enterprises.

And yet boom towns may and will be successful at many points in the future—likely in the near future at the North, but more likely at the South. To succeed, the heads of such enterprises must be men of large capital and of a superior order of business capacity. Large and long outlays must be made from which no immediate profits can reasonably be expected.

If asked how this may be accomplished, the reply is, let the would-be investors or men of business, not promoters or scheming speculators, put up the capital and purchase bodies of real estate well located with a special view to health, good water facilities and water-power and ample and convenient lines of transportation, and if possible more than one way of shipping in and out both raw and manufactured products. Let them purchase such lands and locate and build thereon manufacturing plants of any kind that reasonably promise a profitable return on the capital invested therein, and assemble there an operative population, or, as has been repeatedly done at other places, let the investors from the beginning own the water, the light plant, the street railways, the houses in which the operatives live, and at first depend solely on their manufacturing plants for profit, to await for future accrued profits until a small village has become a thriving town or even a city. Then when the proper time comes, in twenty, thirty or even fifty years, sell the real estate to individual owners at what might then be reasonable prices, but at such rates that would make not only a return of the original capital invested, but pay a handsome rate of profit and interest on the original outlay. It is safe to assume that \$1,000,000 so invested would assemble a working population of 4000 people; another million, 5000 more; another million, 7000 more, and what would the ground be worth on which 16,000 people dwelt in a well-laid-out town or city so long as the capital invested in industries supplied lucrative employment to the workers among so many people? Certainly many times the original cost of the land, to which at the end of no long period could be added the cost of all manufacturing plants erected thereon, and in addition a high rate of interest thereon.

Hence, to build a boom town and make it a success, a large outlay of capital must be judiciously made in the very beginning, which must be invested in plants to employ, feed, clothe and pay proper wages to those worker bees who fill the great human hive that makes a city.

It is not impossible for towns or cities now in existence to take on a boom and

to spring forward with marvelous growth and progress, but when such is the case it is either due to the accident of some natural advantage it may possess or by the course of trade or commerce, but generally towns can only boom by the creation of new industrial enterprises, large and small, which employ and pay workers enough to keep them content in health and happiness, with reasonable chances to better their conditions in life by increased intelligence and accumulated earnings.

Man is a gregarious animal, and will assemble in great numbers where he can live and keep out of the cold in a hive that supplies food, raiment and a reasonable share of this world's enjoyments.

But the town in which Colonel Sellers lives, which is much like the Arkansas man described his section, as a place where "the whole face of the earth is covered with unoccupied land," that stands still, its sleepy, indolent, lazy, non-progressive population whittling sticks on the corner, playing checkers or pitching quoits, vainly looking for some capitalist to come along whom they may pluck or who may build up manufacturing enterprises in their midst by which they may be profited without any outlay on their part either of money or energy, will most likely grow like the fabled dog's tail, "down hill." Such towns may unfortunately be too often seen at the South, and many may also be found at the North. It may be that Rip Van Winkle was no myth, but that his descendants have increased wonderfully, and they may now be the ruling element in very many non-progressive towns which exist, no one knows why or how, without a single enterprise deserving the name, having a something called a hotel, a blacksmith shop and a grog shop, a dilapidated schoolhouse and church, dirty, badly laid off and never worked streets where the grass grows and ragged urchins pitch quoits or play base-ball and many "curs" bark and howl at night. These curs are no doubt the offspring of Rip Van Winkle's dog Wolf. J. L.

Increasing Interest in Gold Mining.

There is welcome news from Georgia and her sister States in the revival of activity in the gold-mining industry, which is now fairly started and has great prospects ahead. At the Hale mine, under Professor Theiss's direction, they are profitably working ore in which there is only \$4 of gold to the ton; by the old methods of washing and amalgamation they could not get fifty cents to the ton, and consequently would not use the mine. Some of the mines which had been practically abandoned are now being worked with good profits by chlorination, and arrangements are being made for the starting up of a number of others which have lain dormant for years.

The Royal mine, in Georgia, near the Alabama line, is one of the larger properties in charge of Professor Theiss. The Franklin mine, now called the Creighton, in Cherokee, is now being actively exploited under the supervision of Professor Theiss's son. The old Bonner mine, considered one of the most valuable in the South, and owned by Southern people, has been long idle, but is to be operated very soon. Three young men, Pope Bros. & Dyer, are energetically at work at the old Cherokee mine. They have just had built at the Atlanta Machine Works a 10-stamp mill for crushing the ore.

The same factory has just completed a fine mill for A. C. Simpson, of Villa Rica, and they expect soon to make a very large one, fifty stamps, for a Boston firm, to be used in Georgia. Mr. Louis

Beck, of the Beck-Gregg Hardware Co., which deals in general mining supplies, says that the increase of its orders for this line of goods indicates a greatly-increased activity in mining industries, especially around Buford, Acworth and Villa Rica. Mr. Beck, who, from his business, comes in contact with a number of men interested in mining, says that there is no doubt in his mind that within twelve months there will be a wonderful development of gold-mining in Georgia, Alabama and South Carolina.

Capt. R. Tanlyn, representing a large English syndicate, has recently gone to work developing mines in North Georgia, and Mr. Howland, representing another big syndicate in the same country, has just been examining the prospects here, and is so much impressed with the advantages of the Southern States that it is confidently expected a large investment will be the result of his investigation.

Mr. J. M. Sullivan, of Greenville, S. C., who was a member of the old firm of Hanley, Sullivan & Hanley, of Alabama, and is now, and has been for years, in the mining real-estate business, says there is a great renewal of inquiry for Southern mining property, and that several large deals have been recently consummated. He says that something quite new about the business is that capital, which hitherto has been coming to us from the North and East almost exclusively, is now coming from the West. This is attributable to the exhaustion of good opportunities for new investments in the West, and is welcome news for us. There are, of course, numbers of rich mines in the West, but the good things are all taken up. Many of the mines out there, if worked on the old-fashioned plan that most Georgia miners are still using, would not pay at all. As soon as the possibilities of Georgia mining under the chlorination process are fully made known, much of the capital now employed elsewhere will be transferred here. Mr. Sullivan travels about over the mining sections, but is making his headquarters in Atlanta for a few weeks.

The Hall brothers, mining engineers, of Atlanta, say there is now greatly-increased activity in gold-mining and fine prospects ahead for renewing operations at old mines and for opening new ones. There seems to be no question that in the South are the best chances for new investments in gold-mining. In what is called the Southern Belt of Georgia there are mines which it is very profitable to work, even by the old process, which wastes so much of the precious metal.—Atlanta Journal.

Superficial Examination of Ores Free

The *Manufacturers' Record*, seeking to turn attention to the mineral resources of the South and to aid its readers in the intelligent investigation as to what may or may not be of value, has arranged with Mr. Charles Catlett, chemist and geologist, of Staunton, Va., to make superficial examinations of samples without charge. Such samples will be reported in the *Manufacturers' Record*, with a word of explanation as to probable or possible value.

The following directions should be observed:

Samples should be sent to Charles Catlett, No. 10 New Court House street, Staunton, Va., with all mail or express charges prepaid.

The name and address of sender should be clearly stated on package.

Care should be taken to select an average sample, otherwise the examination will prove of no value. Quite a small quantity will be sufficient.

A postal card or letter to Mr. Catlett, with a word of explanation as to mode and exact location of occurrence, would assist in giving value to the examination.

J. D. Owing, Fountain Inn, S. C.: No. 1. Compound iron and titanium. Possibly of value if in quantity. No. 2. Shale

carrying small amounts of carbonaceous matter. No value.

R. F. Bradley, Troy, S. C.: No. 1. Chloritic schist impregnated with pyrites. Of no value unless containing gold. No. 2. Specular iron ore. Good quality.

Iron Markets.

Cincinnati, Ohio, June 20.

The business of the week has been irregular. A few buyers, feeling that current prices are safe for scattered future deliveries, have bought quite liberally, and were the demand in sight for their output, very many would place large orders for pig iron. There has been a good run of small orders throughout the week.

The action of the Republican National Convention at St. Louis in its platform and candidates gives to the majority of manufacturers great satisfaction. It seems to have imparted immediately a promise of better times and a revival of general business.

The condition of the grain, hay, potato and fruit crops warrants the expectation of good returns to the farmers.

The railroads have decided, apparently with unusual equanimity, to maintain existing freight tariffs, which, if adhered to, gives assurance of their improved abilities to purchase needed equipment and betterments.

July is the usual purchasing period for many consumers that buy semi-annually. Some of these are entering the market now, somewhat earlier than usual, actuated with the belief that the present is a good time to contract. The inquiries today are rather more numerous and for larger quantities than have been before us for some two months past. We quote the nominal prices current, although the market is in somewhat unsettled condition.

We quote for cash f. o. b. cars Cincinnati:

Southern coke No. 1 foundry...	\$10.50	\$11.00
Southern coke No. 2 foundry...	10.00	10.50
No. 1 soft...	10.00	10.50
Lake Superior coke No. 1...	12.00	13.00
Lake Superior coke No. 2...	11.50	12.00
Hanging Rock charcoal No. 1...	16.00	17.00
Tennessee charcoal No. 1...	13.00	14.00
Jackson Co. silvery No. 1...	13.00	15.00
Southern coke, gray forge...	9.25	9.50
Southern coke, mottled...	—	9.50
Standard Alabama car-wheel...	—	15.50
Tennessee car-wheel...	13.50	14.50
Lake Sup. car-wheel & malle...	15.25	15.50

Chicago, Ill., June 20.

The magic influence of the republican sound-money platform is already felt abroad, and our leading bankers are receiving cable orders for large blocks of American securities, said one banker, a thing almost unheard of for months. Good feeling prevails among our banks generally, and better times are predicted. Furnace companies should be conservative in the matter of advancing prices, and not thus aid in checking the hoped-for improvement. It is safe to predict that the bottom in values has once more been reached, and that delayed purchases will be at higher figures. Some sales have been made at low figures during the last week.

We quote f. o. b. Chicago as follows:

Lake Superior coke No. 1 fdy...	\$12.00
Lake Superior coke No. 2 fdy...	11.50
Lake Sup. charcoal, Nos. 1 to 6...	13.50
Ohio Scotch No. 1...	15.00
Jackson Co., O., silvery No. 1...	14.50
Alabama silvery No. 1...	12.85
Southern coke No. 1 foundry...	12.10
Southern coke No. 2...	11.60
Southern coke No. 3...	11.10
Southern coke No. 1 S...	11.60
Southern coke No. 2 S...	11.35
Mannle...	13.00

St. Louis, Mo., June 20.

The presence of the Republican National Convention this week, with the interest and excitement incident to it, has monopolized the attention of most everyone, and business has been all but suspended in consequence. There has been a run of small orders, but no transactions of importance in the iron trade have developed. The close of the week finds the market demoralized, though a more cheerful outlook has obtained.

We quote for cash f. o. b. St. Louis:

Southern coke No. 1...	\$11.50
Southern coke No. 2...	11.00
Southern coke No. 3...	10.50
Southern gray forge...	10.00
Southern charcoal No. 1...	15.00
Ohio softeners...	16.00
Lake Superior car-wheel...	15.25
Southern car-wheel...	16.25
Genuine Connellsville coke...	5.75
West Virginia coke...	4.70

New York, N. Y., June 20.

While there is a better "feeling," it is not yet backed up by liberal buying in the iron or any other markets. That, it is believed, must of necessity follow. The declaration at St. Louis in favor of the gold standard takes out of the situation the only remaining element of weakness and uncertainty. England has this week been a heavy buyer of our securities, and this has quickly turned the tide of exchange. Timid investors at home have their courage revived, and are taking bonds and stocks more freely. When bonds can be sold new enterprises take life quickly—water-works improvements, railroad repairs and equipment, bridges, ships, buildings, etc. Iron is the first to feel the impulse. It must be admitted that it has not felt it yet, but it will come before the summer is over, or there will be many sorely disappointed people.

Other distinctly favorable features of the situation are the present heavy excess of exports over imports, and, in the iron trade, the unquestioned fact that production is now brought down close to, if not actually below, the current rate of consumption.

We quote for cash f. o. b. docks:

No. 1 X standard Southern...	\$12.00
No. 1 X choice Virginia, such as Shenandoah...	12.75
No. 2 X Alabama or Virginia...	11.50
No. 1 soft Ala. or Virginia...	11.50
No. 1 X lake ore coke iron...	14.50
No. 2 X lake ore coke iron...	14.00
Lake Superior charcoal...	16.35

Philadelphia, Pa., June 20.

A better demand can be reported this week. While no large orders have been placed, the number of small and medium-sized ones has decidedly increased. Philadelphia industries, and those immediately adjacent, are for the most part pretty busy, and are using up a great deal of iron and steel. A moderate addition to current business would make a pretty satisfactory condition. The building of locomotives and machinery for Russia is just now a large factor. The makers of cast-iron pipe of large sizes are also enjoying a boom. The demand for the next year promises to considerably exceed the capacity of the shops.

Rolling mills in Central and Eastern Pennsylvania are complaining of dullness, but are hopeful of the future. There is some free-silver sentiment through this region, but all will work enthusiastically for McKinley, protection and prosperity.

We quote for cash f. o. b. Philadelphia docks:

No. 1 X standard Alabama...	\$12.00
No. 2 X standard Alabama...	11.50
No. 1 X standard Virginia...	12.50
No. 2 X standard Virginia...	12.25
No. 1 X lake ore iron...	14.50
No. 2 X lake ore iron...	14.00
Lake Superior charcoal...	16.15
Standard Georgia charcoal...	17.50

ROGERS, BROWN & CO.

Wise Men

read the advertising pages of the Manufacturers' Record carefully because they are always sure to find something of value; it may be a special sale, or an opportunity for investment, or some new machinery, or some one looking for a location for a factory, or a thousand and one things advertised that may concern you. Every man ought to study newspapers and simply glance over them, but to read in detail the Manufacturers' Record, for instance, and he will be sure to find something that can be made profitable in his business. In its news columns and in its advertising pages he will find matter that may prove invaluable in his business operations.

FINANCIAL NEWS.

The Tennessee Bankers.

The Tennessee Bankers' Association, at its annual meeting held at Lookout Mountain, elected D. N. Kennedy, of Clarksville, as president; C. A. Lyerly, of Chattanooga; J. L. Hutton, of Columbia, and T. J. Latham, of Memphis, vice-presidents; John W. Faxon, of Chattanooga, secretary. The programme of exercises included a paper on relations of banks and trust companies, prepared by Guy N. Walker, of Memphis, and expressions of opinion on the currency questions.

New Corporations.

The Commercial National Bank of St. Louis has been organized by local capitalists, and will absorb the present Commercial Bank of St. Louis.

The officers of the reorganized bank of Greenville, N. C., are R. L. Davis, president; R. I. Tyson, vice-president; J. R. Little, cashier. Its capital is \$50,000.

The New York Fire Insurance Co. has been organized at Marion, S. C., with \$200,000 capital. W. D. Johnson, Jr., and F. D. Bryant, of Marion, are interested.

The Home Building and Loan Association has been chartered at Georgetown, S. C. The officers of the company are: L. Breslauer, president; W. Hazard, vice-president; J. B. Doar, secretary and treasurer; Le Grand Walker, attorney.

The Safety Perpetual Building and Loan Association has been incorporated at Baltimore by Allen G. Stabler, Thos. W. Jenkins, Sr., Charles Morton, William R. Kennedy and Frederick E. Kershaw. The capital stock is placed at \$260,000.

New Securities.

The First National Bank of Birmingham, Ala., has determined to increase its capital stock \$200,000.

The issue of Stafford county (Virginia) 6 per cent. bridge bonds has recently been refunded, New York bankers purchasing the same amount in 5 per cents at 101½.

The city of Charlottesville, Va., will refund \$26,000 worth of water and other bonds at 5 per cent., local firms having offered to take this amount.

Wayne county, W. Va., will vote on the question of issuing \$42,000 in 6 per cent. bonds for refunding its present indebtedness. The county treasurer may be addressed at Wayne Courthouse.

The city council of Newport News has decided to have a special election to consider the issuing of \$90,000 in 4 per cent. bonds, of which \$60,000 will be used for special improvements and a new school building.

Interest and Dividends.

The Citizens' Bank of Savannah has declared a dividend of \$3 per share.

The Baltimore Trust & Guarantee Co. has declared a dividend of \$3 per share.

The New Orleans Gas Co. has declared a semi-annual dividend of \$4 per share.

The Chatham Bank, of Savannah, has declared a semi-annual dividend of 3 per cent.

The Petersburg Railroad Co. has declared a dividend of \$3.50 per share, semi-annually.

The Virginia Trust Co., of Richmond, has declared a dividend of 3 per cent., semi-annual.

The semi-annual dividend of the Northern Central Railroad Co., 3 per cent., will be paid July 15.

The Augusta Factory, of Augusta, Ga., has declared a dividend of 3 per cent. for the last six months.

The board of directors of the Merchants' National Bank of Richmond have

declared a semi-annual dividend of \$3.50 per share.

The Richmond & Petersburg Railroad Co. has declared a semi-annual dividend of \$3.50 per share.

The Planters' National Bank of Richmond has declared a dividend of 5 per cent., payable July 1.

The Richmond, Fredericksburg & Potomac Railroad Co. has declared a dividend of \$3.50 per share.

The Miners and Merchants' Bank of Savannah has declared a semi-annual dividend of \$3.50 per share. Arthur Lynah has been elected president; C. A. Chisolm, vice-president, and W. H. Warley, cashier.

Financial Notes.

David F. Cannon is president, and Thomas C. Gibson is cashier of the new savings bank opened at Concord, N. C.

The Merchants' Mutual Fire Insurance Co., of Charleston, S. C., has elected E. M. Hacker, president; A. R. Thomlinson, vice-president, and J. H. Bruning, Jr., secretary and treasurer.

Mr. W. B. Young has been elected president of the Augusta Savings Bank; also of the National Exchange Bank of the same city. J. Gardner Weigle has been elected cashier of the Savings Bank.

The city of Baltimore has decided to sell its interest in the Pittsburg & Connellsville division of the Baltimore & Ohio Railroad. The interest amounts to \$200,000 in bonds, and will be purchased by Eugene Delano, of Brown Bros. & Co., New York, at par and accrued interest.

The Pittsburg & Connellsville Railroad Co. has entered into an arrangement with Speyer & Co. and Vermilye & Co. for the extension at or before maturity of its \$4,000,000 first-mortgage bonds, due July 1, 1898, so that the principal thereof shall become payable in fifty years from July 1, 1896, with interest meanwhile payable semi-annually at the rate of 4 per cent., both principal and interest payable in United States gold coin. This arrangement has been approved by the Baltimore & Ohio Railroad Co., lessee, and its receivers. Under this arrangement the bankers offer to holders the privilege to present their bonds on or before July 15 next to be stamped, in which case they will receive \$35 in cash for their July 1, 1896, coupons and in addition thereto \$37 in cash per bond, which sum equals the difference between 7 per cent. and 4 per cent. interest on the bonds to July 1, 1898, under discount at the rate of 4 per cent. per annum, less \$20 per bond deducted as a consideration for the extension. The holder of each bond so extended will therefore receive in all \$72 in cash at the time of extension and his extended bond will bear 4 per cent. interest in gold from July 1 next. The existing 7 per cent. coupons for interest from July 1, 1896, to July 1, 1898, will be detached from the bonds and a new sheet of coupons for interest at 4 per cent. for the full term of the extension will be substituted, such coupons to the extent of \$15 each, together with the July 1, 1896, coupons, to be held by the bankers under their agreement with the railroad company, uncollected, if required, for the period of two years. Bonds of holders not availing themselves of the above privilege will be bought by the bankers at \$1002 in cash per bond, with July 1 next coupons and all subsequent coupons attached, provided this offer be accepted and the bonds, with coupons attached, presented to them on or before July 15 next.

The people of Fitzgerald, Ga., have decided to have a Board of Trade, and have elected A. Godenow, president, and H. G. Taylor, secretary.

RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

Baltimore and Washington Line.

The Columbia & Maryland Electric Co. has awarded to the Westinghouse Electric Co. the contract for thirty-two 100 horse-power and twenty thirty horse-power motors, with which will be equipped the cars, which are now being built for the company by the Barnie & Smith Co., of Dayton, Ohio. The twenty small motors will be used on the Baltimore end of the line, and the 100 horse-power motors will be used on the long runs between Baltimore and Washington.

Charleston & Western Carolina.

The purchasers of the Port Royal & Western Carolina road have reorganized it under the title of the Charleston & Western Carolina. The incorporators of the new company are Thomas F. Ryan, of New York; Henry Crawford, of Chicago; Samuel Thomas, of New York; John B. Cleveland, of Spartanburg, S. C.; J. C. Fleming, of Lawrence, S. C.; D. A. P. Jordan, of Greenwood, S. C.; J. A. Brock, of Anderson, S. C.; Avery Patton, of Greenville, S. C., and J. P. Doughty, of Augusta, Ga. The capital is to be \$1,200,000.

Large Order for Cars.

A Chicago dispatch states that the Illinois Central Company has determined to add a large quantity of rolling stock to its equipment, and is now giving out contracts, which in the aggregate will amount to nearly 4000 cars. It is understood that the rolling stock includes fifty coal cars, 300 refrigerator cars, 2500 box cars, in addition to a number of others. The outlay for this rolling stock will amount to over \$1,000,000. It is well known that the very large increase in the freight business of the Illinois Central has not only rendered additional sidings imperative, but that it has also created a demand for more cars. The large orders which are being given are an indication to what extent this traffic has increased.

Houston, East & West Texas.

The Houston, East & West Texas Railroad Co. has been transferred to what is known as the Blair Syndicate, which includes James A. Blair, of Blair & Co., New York; T. W. House, M. G. Howe and Henry Brashear, of Houston; also Edgar Marston, of New York. These gentlemen have been elected directors, while T. W. House has been elected president and treasurer; M. J. House, vice-president and general manager; James A. Baker, secretary, and Thos. Cronan, general superintendent. The Houston, East & West Texas is 192 miles long, extending from Houston to the Sabine river. It connects with the Houston & Shreveport Railroad, both roads being operated by the same company, making a system 232 miles in length.

A Model Repair Plant.

The shops of the Southern Railway Co., which have lately been completed in Atlanta, include nine new buildings—a blacksmith shop 80x180 feet, a machine shop 190x128 feet, a woodworking department, an engine-house, boiler shop, storehouse and office building, etc. The space covered by the shops represents nearly eighteen acres, and the total cost was about \$100,000. The power is furnished by two 250 horse-power Corliss engines, which also operate an electric plant, to be used for running some portions of the machinery independently of the rest, also for furnishing light. Ten

locomotives can be repaired at once in the shops, and a large number of cars. The Southern Railway Co. has 900 men in its employ in Atlanta alone.

Georgia Midland's Lease.

The Southern Railway Co. has leased the Georgia Midland & Gulf road for ninety-nine years, which practically places it in the perpetual control of the Southern system. This line extends from Columbus to McDonough, traversing the western part of the State for a distance of about 100 miles. It was recently sold to the bondholders by order of the court, and it was reported was to be extended to Atlanta, which is a few miles distant from McDonough, the northern terminus. It is understood, however, that a service will be inaugurated to Atlanta from Columbus by the way of the Georgia Midland and Atlanta & Florida road, which is also under the control of the Southern, thus avoiding the building of an extension. By the terms of the lease the Southern Railway Co. guarantees the interest on \$1,650,000 of the first-mortgage bonds.

Twenty Years of Southern Building.

A very interesting and exhaustive article has recently appeared in the Railway Age, prepared by Horace R. Hobart, on "Twenty Years of Railway Development." Mr. Hobart, who is one of the leading authorities in this country on the subject of railroads, has spent much time and labor upon the matter, and as a result has added some very valuable statistics to the library of transportation literature. Among other things he has given a diagram showing the changes in twenty years in the different States. This development is especially noticeable in the South, and the Manufacturers' Record presents some of the figures, which show the remarkable increase in mileage in this section. The increase in Virginia in the twenty years is a little over 2000 miles; in West Virginia, nearly 1300 miles; in North Carolina, 2100; in South Carolina, 1300; Georgia, 3000; Florida, 2600; Kentucky, 1700; Tennessee, 1500; Alabama, 1800; Mississippi, 1500; Louisiana, 1700; Arkansas, 1700; Texas, 7800. In only one of the Southern States, according to the article, were there over 2000 miles of line in 1876. This was Georgia, which had 2264 miles of completed line that year. The most remarkable State is Texas, as might be expected. The mileage in 1876 was but 1685, while at present it is 9440. Louisiana makes another excellent showing, having 466 miles in 1876 and 2123 miles at present. This does not include several roads which are now under way, and which will add fifty or sixty miles to this State's total of 1897.

Every Minute Occupied.

It is an old saying that railroad officials are about the busiest class of men; consequently, it is somewhat difficult to pick out a man who might be termed the busiest of them all. It is doubtful, however, at the present time if any railroad man in this country today has more actual work to do than W. H. Baldwin, Jr., vice-president of the Southern system. He has practically the entire charge of this combination of lines, which extend throughout the South, as President Spencer is in Europe and Mr. Finley has lately resigned as third vice-president. When Mr. Baldwin was in charge of the transportation department it was supposed, to use a popular expression, that he had his hands full. The present conditions have placed much more responsibility on his shoulders. He is today practically the head of the entire combination of lines, and is almost constantly traveling from one division headquarters to another. He may be in Washington one day, Atlanta

two days afterwards, up in Tennessee twenty-four hours later, and perhaps back in Washington at the end of the week. His private car is his home and his office. His correspondence is handled while he is on the road, and many of the most important conferences are held with superintendents and other officers while the train is going at the rate of forty miles an hour. There is scarcely a minute during the time he is awake that is not utilized.

As the readers of the Manufacturers' Record are well aware, Mr. Baldwin is comparatively a young man—still in the thirties. It was well known that he had made a remarkable record in the railroad world before he took up his present position on the Southern, but his connection with the latter system has given him an opportunity to show his truly wonderful executive ability. There is no question but what today few men in the country equal him in the qualifications of an all-round railroad official.

Railroad Notes.

The Mexican National Railway Co. is about to establish an office at Atlanta, Ga.

F. M. Aldrich has been appointed general superintendent of the Gulf, Beaumont & Kansas City.

The Independent Boat Co., of Columbus, Ga., has purchased another steamer, to be operated on the Chattahoochee river.

The Ohio River Railroad Co., it is reported, has determined to put on a line of chair cars between Parkersburg, W. Va., and Pittsburgh.

Charles Jones has been appointed traveling passenger agent of the Kansas City, Fort Scott & Memphis, with headquarters at Birmingham, Ala.

H. C. Beck, H. R. Read and others, of Chattanooga, Tenn., have purchased what is known as the Chattanooga & North Side Street Railway Co.

The Chesapeake & Ohio Railroad Co. has awarded the contract for 100 30-ton coal cars to the Ensign Manufacturing Co., of Huntington, W. Va.

At the annual meeting of the Lynchburg & Durham Railroad Co., W. C. Houston, Jr., of Philadelphia, was elected president, and A. J. Hemphill, of Philadelphia, secretary.

The new Missouri, Kansas & Texas depot of Greenville, Texas, has been thrown open to the public. It cost \$30,000, and is one of the finest station buildings in the Southwest.

Wm. Bailey Thomas, commissioner of the Southern States Passenger Association, has tendered his resignation. It is reported that Joseph Richardson, general passenger agent of the Florida East Coast Line, may succeed him.

The new plant steamship Grand Duchesse is to be used this season in the service between Boston and Halifax. The Plant Steamship Co. intends placing five steamers on this route. The vessel is now completed at Newport News.

The Texas & Pacific road has carried a carload of slacked coal, which came from the coal mines near Fort Worth, to Alabama, to see if the coal they turn out can be made into as good coke as that made in Alabama.—New Orleans Picayune.

H. J. Fitch has been appointed receiver of the St. Louis, Avoyelles & Southwestern Railroad, which is now being built between Bunkie and Simmsport, La. F. M. Welch, of Marksville, and a number of Western capitalists have been promoting the project.

The Norfolk & Ocean View Railroad Co., which operates an electric line to Ocean View on Hampton Roads, has purchased a number of summer cars, includ-

ing two very powerful motors, which it is understood will be able to haul five or six other cars at a trip.

The Plant Railway & Steamship Co. has placed in operation a line of sleeping cars between Savannah and Asheville, by the way of Spartanburg. The route is by the way of the Plant system, the Port Royal & Augusta, Port Royal & Western Carolina and the Southern system.

The Official Railway Guide for June contains an unusually large amount of information indispensable to the summer tourist regarding mountain, seashore and other resorts and the best routes for reaching them. It is a necessary companion to every tourist.

The York River Line has completed arrangements for its new line of steamers between Baltimore and Norfolk on and after July 1. The steamers Atlanta and Charlotte will be put on the route, leaving Baltimore from Pier 19, Light-street wharf, at 6 P. M. daily except Sunday. From Norfolk they will leave at 5.30 P. M. from the company's wharf.

According to the charter of the Lancaster & Chester Railroad Co., which is the title of the reorganized Cheraw & Chester Railroad Co., the officers are: Leroy Springs, president; W. H. Hardin, vice-president; R. C. McManus, secretary, and William Ganson, treasurer. The main office of the company will be at Lancaster, S. C., and the capital stock \$50,000.

A dispatch from Montgomery, Ala., states that a clear title has been secured to the site for the union depot in that city, and that the structure will be erected by the South & North and Mobile & Montgomery divisions of the Louisville & Nashville Railroad. Among those interested are H. F. De Bardeleben, of Birmingham, Ala., and B. J. Baldwin, of Montgomery.

A dispatch from Parkersburg, W. Va., states that John T. McGraw and others have purchased the property of the Holly River Lumber Co., which includes a railroad fifteen miles in length; also a saw mill and a large tract of timber land. The railroad is a feeder of the West Virginia & Pittsburgh road, and extends to a point near Cowen, W. Va. The company's main office is at Palmer, W. Va.

The Catonsville Short Line Railroad Co. has elected Henry T. Douglass, president; David M. Newbold, vice-president, and R. Stanley Carswell, secretary and treasurer. These gentlemen are all interested in the Columbia & Maryland Electric Railroad, and their election is understood to mean that the Catonsville Short Line will be a branch of this system, and that it will be converted into a trolley line.

The new route established by the Florida East Coast Line along the Florida Keys has become very popular with tobacco and fruit shippers. A large quantity of freight, such as pineapples and tobacco, is now being sent to Jacksonville, Fla., for shipment to New York by the Clyde Line. The freight comes from Key West and the Florida Keys to Miami, the terminus of the Florida East Coast Line, and thence up the railroad to Jacksonville.

Charleston, S. C., is to be congratulated that Mr. A. W. Swanitz, who has been chief engineer of the New Orleans & Western road, has agreed to take charge of the immediate construction of the proposed road from Charleston to Macon. Mr. Swanitz has given to New Orleans such a magnificent work in the Port Charlotte improvements that his connection with the Charleston enterprise and with the effort to develop the shipping interests of that city will no doubt attract wide attention.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

The Real Beginning of Fine Goods Manufacture in the South.

The Manufacturers' Record has always claimed that as soon as the South had secured a practical monopoly of the coarse cotton goods manufacture, it would promptly turn its attention to the production of finer goods. The beginning of this movement is to be seen in the organization of a company at Gaffney, S. C., which will build a 10,000-spindle mill to be equipped with machinery to use Sea Island and Egyptian cottons. This mill is intended to spin fine numbers from 100s to 150s, and to be woven into all kinds of fancy cotton goods. This will be the only mill in the South producing such fine goods as this, and in fact the only mill that can be entitled to rank as a fine goods mill. The ablest cotton manufacturers in the South are satisfied that the manufacture of this class of work can be carried on in the South just as well as in the East, and as the item of labor enters more largely into the value of this class of work, the South necessarily has a greater advantage in making these goods.

This company will probably be organized as the H. D. Wheat Co., Mr. H. D. Wheat, the treasurer of the Gaffney Manufacturing Co., being interested in it. The great success of Mr. Wheat in cotton manufacturing almost guarantees the success of this new undertaking.

To Curtail Production of Cotton Goods

The textile manufacturers of the South have been called to meet in Atlanta on June 29. The object of this session is to endeavor to secure co-operation in curtailing production. At the recent session of the textile manufacturers in Atlanta a committee upon "limitation of product" was appointed. It was to be the duty of this committee to take up some plan which would decrease the production of goods in this section.

The following letter has been addressed to the members of the association:

"Atlanta, Ga., June 20.
"To the Textile Manufacturers of the South:

"In response to the circular-letter of May 23 by the undersigned committee, addressed to all Southern textile manufacturers, 202 replies have been received so far. The answers, with very few exceptions, are expressive of the great necessity of immediate curtailment of production. About two-thirds of the mills state that they will send a representative, with full powers, to a meeting called for the purpose (the majority favoring Atlanta). A few mills, not in position to curtail production, are sold ahead on contracts, while some others are either shut down already or running short time.

"In view of these expressions, which forcibly and almost unanimously point to the curtailment of production by concerted action of the mills as the only means to check the disastrous condition now prevailing, and believing further that the moral effect of such action would at once exert a most marked effect on values, and would immediately stimulate a healthy demand for our productions, the committee decided, in order to bring about the desired result, to call a convention of the Southern textile manufacturers for Monday, June 29, at 1.30 o'clock P. M., at the Aragon Hotel, Atlanta, Ga.

"You are earnestly requested to attend this convention, as only a representative meeting and concert of action will achieve the objects to be attained. In order that

the proper arrangements can be made, it is desired that you notify Mr. T. H. Martin, secretary, 819 Equitable Building, Atlanta, Ga., whether or not you will be represented. Very respectfully, S. Odenheimer, chairman, New Orleans, La.; George A. Mebane, Asheville, N. C.; R. F. Larned, Natchez, Miss.; W. T. Maginnis, New Orleans, La.; James J. Hooker, Covington, Ky.; W. J. Kincaid, Griffin, Ga.; B. Friedman, Tuscaloosa, Ala.; J. W. Tullis, Eufaula, Ala.; J. F. Hanson, Macon, Ga., committee on limitation of product."

A Cotton Density Experiment.

There has been a good deal of speculation lately regarding the doubling of cotton, and that the much mooted question as to whether the staple is injured by so doing may be fully determined, the cotton firm of Knoop, Frerichs & Co. have, during the past week, experimented on twenty bales of cotton at Port Chalmette, and much interest in them was manifested upon the wharf today, where they were to be seen. This is a very important question, in view of the saving in ocean freights to be made by the increased density secured, if it can be satisfactorily done.

Of these twenty bales, five were compressed as single bales, resulting in a density of twenty-eight to thirty-five pounds per cubic foot. A bale compressed to such a high density, as a single bale, earns a reduction in the rate of freight, or, in other words, a differential of forty cents.

In three cases two bales were compressed together, or double bales, as it is known among the cotton men, showing an average density of forty-five pounds. Cotton so pressed will earn a differential of eighty cents per bale.

Then, again, the experiment was continued by placing three bales together in three instances, showing an average density of over fifty pounds, and a bale of cotton compressed to such an excessive density can be carried for just one-half the current ocean freight.

The outcome and condition of this cotton upon its arrival at Bremen is watched with a good deal of interest. It is the first time in the knowledge of the cotton men of this city that three bales have been compressed together. Doubling has been in practice for years, and with the consequent saving in freight per bale it is very likely that trebling will become a common practice next season, if the expected large crop should materialize, in order to effect a saving in the ocean freights.—New Orleans Picayune.

A Webbing Mill at Charlotte.

Messrs. H. J. McLaurin, Jr., E. D. Latta, H. S. Chadwick, W. G. Stone, J. W. Heard, Wm. Anderson and Dr. Jos. Graham have completed arrangements for the establishment of another textile mill at Charlotte, N. C. They will organize a \$12,000 stock company at once and equip a plant for the manufacture of webbing, cordage, back bands, etc. A site will be secured and new building erected for the plant.

Textile Notes.

The Ada Mill, of Charlotte, N. C., has declared a semi-annual dividend of 4 per cent.

The Springfield Cotton Mills, of Laurel Hill, N. C., will put in new Pettee cards at once.

Messrs. F. J. Buyck, J. E. Wannamaker and S. Rich, of St. Matthews, S. C., will erect a cotton mill of medium size.

The South Side Cotton Mills, of Winston, N. C., is making preparations to commence work on its additional build-

ing 102x162 feet, and will equip it with 250 looms. The main building has only yarn machinery installed.

The Eclipse Woolen Mills, of Louisville, Ky., has resumed operations after six weeks' idleness, with 250 operatives employed.

A report is current that a \$50,000 cotton-mill company is being organized at Concord, N. C., and Mr. J. L. Hartsell is said to be interested.

A company has been organized at Waxahatchie, Texas, for the purpose of erecting a \$10,000 cotton mill, and charter will be applied for at once.

It is reported that Mr. Geo. W. Hinshaw, of Charlotte, N. C., has bought a site for a cotton mill at Yadkin Shoals, near Yadkinville, N. C. It is stated that Northern capitalists will furnish the funds for a \$300,000 plant.

The directors of the Augusta Factory, of Augusta, Ga., held their annual meeting last week. The financial report showed a successful year's business, and a semi-annual dividend of 3 per cent. was declared.

The Florence Cotton Mills, at Forest City, N. C., will change its plant from a yarn mill to a weaving plant. An additional building will be erected during the summer, and new machinery will be bought in the fall.

The Mossy Creek Woolen Mills, of Mossy Creek, Tenn., has been very busy with orders, having to operate day and night in order to fill them. Twelve additional looms have been ordered and will be installed by W. T. Russell and John L. McKinney, managers.

Work progresses on the additional building for the Arista Mills, of Winston, N. C. The structure will be 72x100 feet in size, and be equipped on completion with finishing machinery. Additional room in the main building will also be fitted with new machinery, principally looms.

The Grantville Hosiery Mill Co., of Grantville, Ga., reported last week as organized, expects to commence work very soon on its proposed \$10,000 mill. The latest improved automatic machines will be put in for manufacturing fine and medium hosiery. Capacity daily to be 200 dozen, and employ forty hands.

The plans for the new cotton mill, recently noted as to be built through the efforts of Mr. Howard Cole at Shreveport, La., are now on hand. The main building will be a three-story structure 75x236 feet, engine-house, dye-house, boiler-house and others being separate. The plant is to have over 10,000 spindles and several hundred looms.

The Galveston Rope and Twine Factory at Galveston, Texas, employing seventy-eight hands, has ceased operations. This step is said to have been caused by the failure of the interstate commerce commission to direct railways to equalize freights to a certain territory where the factory had its best trade. The railways deny this, saying that the twine company could not meet Eastern competition.

The Warren Manufacturing Co., which is to build a cotton mill near Aiken Junction, S. C., and recently reported fully in this column, has received its charter. The incorporators named are Messrs. Chas. W. Davis, of Graniteville, S. C.; W. B. S. Whaley, of Columbia, S. C.; Robert Powell, of Aiken, S. C.; Arthur S. Wattles, of Massachusetts, and James Leighton, of Boston, Mass.; capital stock placed at \$200,000.

The Maryland Silk Mills, at Hagerstown, Md., which were recently bought by Mr. A. P. Conner, of Hagerstown, have been sold again. Mr. Rudolph Cohen, of New York city, has purchased

the machinery, and it is said he represents a New York silk syndicate which will endeavor to arrange for the addition of a silk-throwing plant to employ 100 hands and the resumption of operations. The buildings have also been optioned for ninety days. In the event of the negotiations failing, the machinery will be removed from Hagerstown.

Mr. William S. Pennick, Jr., chairman of the cotton-mill committee, Shreveport, La., writes the Manufacturers' Record that any cotton-mill company in the North contemplating locating in the South or establishing a Southern plant is invited to correspond with the Shreveport cotton-mill committee in order to have the advantages of that locality presented in detail. The people of Shreveport have made up their mind to develop the cotton-manufacturing interests of that prosperous city, and they want to get in communication with cotton-manufacturing enterprises looking for locations.

A Suggestion as to Homes for Workingmen.

Mr. R. T. Crane, of Chicago, in a letter published in the Tribune of that city, discussing business conditions, suggests the desirability of special efforts being made to secure the erection of better homes for working people in large cities. In the course of his letter, he says:

"I would organize a company with sufficient capital to purchase tracts of cheap land in large cities, and erect on them homes for mechanics and workingmen.

"The buildings should be produced at a cost so low as to make them in demand and certain of a ready sale. To accomplish this the material must be bought at the lowest figure, wherever possible, at concessions from the current prices; also, the mechanics employed must work at prices much lower than the usual 'combination' wages, which, however, should be no hardship, for the plan proposes to use only mechanics who would otherwise be unemployed, and whenever they had an opportunity to work elsewhere at higher wages they would be at liberty to drop this work.

"The buildings when finished would be sold at auction, preference being given to the class of mechanics employed in their erection, and on deferred payments at low rate of interest, thus making it as easy as possible to pay for them. Whatever was realized by the sale above the actual cost, with a very low rate of interest to the company on its investment, to be divided pro rata among the mechanics employed in the construction, thus giving them additional wages.

"In this way the purchaser would get a home at a cost much below what would be possible under ordinary circumstances; employment would be given to men of his class, and also to the laborers who produced the raw material; and as the men have been employed on a class of buildings that otherwise would never have been erected, the regular wages established by the union have in no manner been interfered with.

"If such a scheme were undertaken in the proper spirit by men employed in the building trades, I have no doubt of its practicability or that the capital could be raised without difficulty. And in every large city where, as a rule, mechanics live in inferior homes, there is a large field for such an enterprise."

The plant of the Cedar Cliff Cement Co. at Cedar Cliff, Mineral county, West Virginia, was sold at sheriff's sale on the 23d inst. at Keyser to T. S. Kean, of Cumberland, Md., for \$8600. The sale includes large quarries and land underlaid with cement.

COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

The Market for Cottonseed Products.

New York, N. Y., June 23.

Cotton oil is fairly steady at unchanged quotations. The export and home demand have decreased; the latter, however, evinces renewed interest at this writing, but on the part of holders, either here or at producing centres, there is no evidence that pressure to sell is a feature of the hour. The firmness which this market displays is reflected by a similar attitude throughout the South in the various oil grades. Although quotably low, lard is improving; the uninterrupted influx of hogs to the Western markets, however, indefinitely check an appreciable advance. At this market 4.35 to 4.37½ cents are quoted spot, and 4.40 cents July. Tallow is the most progressive article on the list of competing products, and at 3½ cents, which is now the price current, cotton oil will probably receive renewed attention from soap-makers. The fair demand for compound lard, regardless of the low price of the non-compounded article, has been helpful in sustaining domestic trading in oil. Stocks in England are yet plentiful and low-priced, and unless for special requirements, the demand for American oil is extremely limited. France has lessened her demands for the time, and it would look as if prices will be largely influenced hereafter by the character of the demand from that country and other continental distributing centres. Crude oil is in fairly good demand, but stocks are light. Nothing important is transacting in butter or white oils, while off-grade yellow is bereft of interest. For prime crude 20 to 21 cents is quoted; loose at the mills, 16½ to 18 cents; barrelled off grade here, 18 to 19 cents; prime yellow, 24½ to 25 cents; off-grade yellow, 24½ to 24¾ cents; prime winter yellow, 31 to 33 cents; butter oils, 26 to 27 cents; prime white, 27½ to 28 cents, and soap stock, 5½ to 5¾c. per pound. Receipts aggregate 4000 barrels and exports 2000 barrels, three-fourths of which is destined for France.

Cake and Meal.—The improved demand and advancing prices in these products tend to offset the disadvantages resulting from the depression in oil values. Shippers are in the market at the advancing quotations, and with the rapidly-diminishing stocks and decreasing production the quantity carried over into the next cake-making season will be exceedingly light. The value of meal as a fertilizing material is also increased. While quotations are only 50 cents, and, in some instances, 75 cents per ton over those quoted in our last, the improved demand and brighter outlook are the real advantages of the change. New Orleans quotes \$19.50 per ton, while latest advices from England report a steadily-increasing demand for American cake. The home-made undecorticated variety from Egyptian seed is quoted at £3 10/6, while prime American is firm at £5 2/6, and for special lots £5 5/6 is quoted. At this market cotton-cake meal is quoted at \$20 to \$21 per ton, while linseed-cake meal, formerly much higher-priced, is only \$18. As recent purchases have been for delivery within the next two months, the volume of exports for the week is small. No receipts at Eastern points are reported. An unusually large list of representative cotton-oil men from the South was noted during the week at this market.

Cottonseed-Oil Notes.

The Port Gibson Oil Works, at Port Gibson, La., closed a very prosperous season on the 16th inst. and shut down for the summer. The mills are under the management of Mr. H. Gospel.

The market for cottonseed products at Houston, Texas, is quiet, with stocks throughout the State generally light. The supply of cottonseed meal is well cleaned up, and stocks at mills hardly worth comment. Quite a number of sales of oil have been made during the past week at prices a shade under quotations. Mills are generally disposing of their stock of oil as quickly as possible. The following quotations represent the prices current posted at the Houston Cotton Exchange on the 18th inst.: Choice crude oil for butter oil, strictly prime crude oil and prime crude, 17 cents; off crude oil, according to grade, 10 to 16 cents; prime butter oil, loose, 20 cents; prime summer yellow oil, 19 to 19½ cents; prime cottonseed meal and cake, \$13.50 to \$15 per ton f. o. b. mill interior points. The market closed easy.

At New Orleans the market for cottonseed products on the 19th inst. was weak, with a decline in yellow oil. Receivers' prices for all products of cottonseed are quoted as follows: Cottonseed, \$9 per ton of 2000 pounds net to the mills, no commission of any kind to be added; cottonseed meal jobbing at depot, \$17.25 to \$17.50 per short ton of 2000 pounds; for export per long ton of 2240 pounds f. o. b., \$19.25 to \$19.50 for current month; oil-cake for export, \$19.25 to \$19.50 per long ton f. o. b.; crude cottonseed oil at wholesale or for shipment, strictly prime in barrels, per gallon, 19½ to 20 cents; loose, per gallon, 16 to 18 cents, according to location of mill; refined cottonseed oil, prime in barrels, per gallon, at wholesale or for shipment, 23 to 24 cents; cottonseed hulls delivered, per 100 pounds, according to location of mill, 20 to 25 cents; foots, 1 to 1½ cents; linters, according to style and staple—A, 3½ to 3¾ cents; B, 3 to 3½ cents; C, 2½ to 2¾ cents.

Fuller's Earth.

The recent discoveries of fuller's earth in Florida, reported in the Manufacturers' Record, which have attracted so much attention, are referred to by Dr. David T. Day, of the United States geological survey, in the Engineering Magazine, in which he says:

"The most remarkable evidence of the ability of the United States to respond quickly to an extended demand has been the adaptation of the clay, 'fuller's earth,' in the place of animal charcoal, as a filtering medium for oils and other substances. No sooner did the demand for the imported article (which has been used in this country for years for the ordinary purposes of fuller's earth) increase to any extent than large deposits were immediately discovered and put into service in this country. The main source of supply thus far has been Gadsden county, Florida, in the neighborhood of Quincy. Two companies are already engaged in the active production of this clay, notwithstanding the fact that it has been in use hardly more than a year. Their output was 6900 tons in 1895. It is a case of replacement of one substance by another, so that refiners, in practically discarding animal charcoal, have decreased its market value fully a third within a year. Further deposits of this material are known in Southern Georgia as a northern extension of the deposits in Gadsden county, and indications of its presence are already sufficient to make it probable that comparatively enormous quantities will soon be produced, keeping this substance in the class of minerals of which there is a large oversupply."

PHOSPHATES.

Phosphate Markets.

Office Manufacturers' Record.

Baltimore, Md., June 25.

The local phosphate market is still very quiet, and the volume of business is hardly worthy of comment. The demand at the moment from the local trade is light, while from out-of-town buyers some business is recorded. Advices from points of production are unchanged, and in South Carolina the market is quiet, with values about steady at last week's figures. Crude phosphate is still quoted at \$3 at the mines, hot-air-dried \$3.25 f. o. b. vessel in Ashley river, \$3.45 f. o. b. city. Ground rock in bulk, \$5.50 f. o. b. vessel at city. In the Florida phosphate belt the progress of development is slow, and at present values miners prefer to close down their plants rather than accept current values. There is, it is said, a better feeling in the European market, and values show signs of stiffening somewhat. The demand is a shade better, and a number of charters have been closed for July and August loading. In the local market this week the schooner Edward Berwind was taken to load phosphate at Bull River, S. C., for Baltimore. There is very little activity in sail tonnage in New York, and rates are low. Steamers for miscellaneous freight are in fair request, with rates firm. The following phosphate charters are reported: A schooner, 615 tons, from Bull River, S. C., to Baltimore with phosphate rock at \$1.70; a British steamer, 1354 tons, from Fernandina to Hamburg with phosphate at or about 15/6, early July; a schooner, 705 tons, from Tampa to Baltimore with phosphate rock at \$2.10, and a schooner, 600 tons, from Tampa to Philadelphia at \$2, option of Cartaret at \$2.10.

Fertilizer Ingredients.

The market for ammoniacs has ruled quiet during the past week. There is, however, some demand from Eastern buyers, and also considerable inquiry from the South. In the West stocks are light, and the market steady for spot and firm for futures. Last sales of blood for June to August shipment were at \$1.32½ to \$1.35, Chicago and St. Louis. Sales of 8 and 20 tankage are reported at \$1.20 to \$1.22½ and 10 f. o. b. Chicago. Nitrate of soda is quiet and unchanged. In New York lots ex ship could have been purchased at \$1.75 to \$1.77½, and for moderate quantities \$1.80 was the top rate.

The following table represents the prices current at this date:

Sulphate of ammonia, gas....	\$2 30@	—
Sulphate of ammonia, bone....	2 15@	—
Nitrate of soda.....	1 80@	1 85
Hoof meal.....	1 55@	—
Blood.....	—@	1 65
Azotine (beef).....	—@	1 60
Azotine (pork).....	—@	1 65
Tankage (concentrated).....	1 55@	—
Tankage (8 and 20).....	1 55 and 10	—
Tankage (7 and 30).....	15 50@	—
Fish (dry).....	19 00@	—
Fish (acid).....	10 00@	11 00

Phosphate and Fertilizer Notes.

The total production at the phosphate mines of Tennessee during the month of May was 3575 tons, the shipments 3970 and stock on hand 3880 tons.

The large foreign steamship Nymphaea completed her cargo of phosphate at Fernandina, Fla., on the 18th inst. and dropped in the stream ready for sea.

Messrs. J. M. Lang & Co., of Savannah, Ga., cleared the steamship Glynysmith from that port on the 17th inst. for Rotterdam with 2430 tons of phosphate rock, valued at \$24,300.

The new Consolidated Phosphate Co.'s plant at Fort Ogden, Fla., is running on full time day and night and making regular shipments. The company works about 200 men, and will soon replace the wooden barges with iron ones.

The Indian Creek & Mossy Spring Phosphate Co., near Centerville, Tenn., now controls the property formerly worked by the Central Phosphate Co. Its plant is situated within 300 yards of the railroad, very convenient for shipping the product.

The Swan Creek Phosphate Co., in Swan Creek valley, Tennessee, is now at work on the extension of its narrow-gauge railroad across Swan Creek valley to its Blue Buck property on the east side of the creek, and will probably have its line completed by the 1st of July.

A charter was granted last week to the John C. Ferguson Co., of Charleston, S. C. The incorporators are T. C. Ferguson and Thomas S. Inglesby, of Charleston, and the capital stock is placed at \$4000. The company proposes to do a general importing and exporting business, handling phosphate, naval stores, etc.

The following vessels cleared from Charleston, S. C., last week for domestic ports with phosphate cargoes: Schooners Oscar C. Schmidt for Philadelphia with 780 tons, and James Boyce, Jr., for Norfolk with 1005 tons. The total shipments to domestic ports since September 1, 1895, amount to 92,659 tons, against 79,604 tons last year.

The schooner John K. Souther sailed from Port Tampa, Fla., on the 17th inst. for Baltimore with 1534 tons of phosphate from the Palmetto Phosphate Co. The British steamship Langoe sailed from Port Tampa on the 21st inst. for Landskrona via Sydney, Cape Breton, with 3200 tons of phosphate rock from the Florida Phosphate Co.

Good Roads for Arkansas.

The Board of Trade of Little Rock, Ark., is agitating the question of the more general employment of convicts on road-making in that State, and the agitation promises to result in much benefit in this direction. The intention is to construct a system of macadamized or other highways equally as good, in the vicinity of Little Rock, with a view to increasing the trade with the country districts. An effort will be made to have a law passed by the legislature which will compel the employment of convicts upon such roads, under supervision of proper committees. It is expected that about 600 will be placed on road-making, while 400 will be employed on State farms to raise food supplies for the maintenance of those engaged in the road improvement.

Steel-Track Highways.

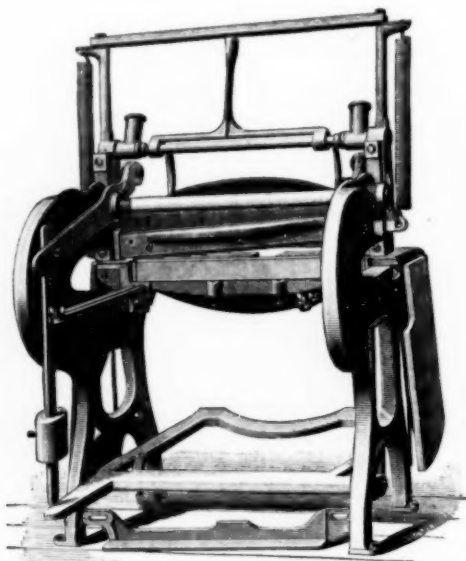
The question of good roads, which is so important in the South, has brought up the consideration of steel in the making of highways. What is known as "the steel-track highway" is now attracting much attention. It is described as a track five inches wide, one-quarter of an inch thick and laid flat on a longitudinal timber, which, in turn, is laid on cross-ties. In short, it might be described as a very wide railroad track. The middle and sides of the road, being filled with stone, make a sort of macadamized road, with steel tracks for the wagon wheels. It is claimed that on this track one horse can draw nearly twenty times as much as on a dirt road. With the low price of steel and the abundance of wood for ties and timbers in the South, there is every reason to believe that such highways might be built along thoroughfares leading to trade centres, and be of much value to the people in the cities, as well as the farmers, while at the same time the reduced expense of hauling and the increased load placed on a wagon would in a few years pay for the additional cost of construction.

MECHANICAL.**Improved Power Shears.**

An improvement in power shears is illustrated on this page. Front and back views are shown by the accompanying cuts. It is the latest advance made in



FRONT VIEW.



IMPROVED POWER SHEARS.

BACK VIEW.

this direction by Bertsch & Co., Cambridge City, Ind., well-known makers of such equipment. This machine is a combined squaring and slitting shears. These machines are adapted to light or heavy work. A variety of sizes are made, with six to 21-inch throat, for 16, 18 and 20 or lighter gages, and special sizes for Nos. 12 and 14, for slitting wide sheets if desired—practically two machines in one.

Valuable improvements are made in

with trimming gage for trimming and slitting sheets quickly and accurately and to avoid marking off; patent gage point indicator at last cutting end, and shearing lines on extension tables at said end; patented quick-operating and self-locking hold-down, important for cutting long sheets or heavy work accurately; patented hand lever attachment more powerful than the treadle, convenient to operate it in conjunction with the treadle

This machine will work equally as well without the side springs to raise the knife bar.

Portable Electric Drill

The advantages of the portable drill are well understood. Such a tool, operated by electricity, becomes an important

By means of a clutch pin in the back gear a speed suitable for one and two-inch drills can be obtained instantly; the intermediate speeds are obtained by a starting and controlling box.

In the arrangement, the motor is running at its normal speed when doing its heaviest work.

The machine has a feed arrangement for both drilling and boring.

The arm has a reach of twenty-eight inches, drilling at one setting anywhere over a surface of fifty-six inches outside diameter and sixteen inches inside diameter. The arm is moved in and out by a screw and rotated about the post by a worm and tangent wheel.

The spindle contains a No. 4 Morse taper socket, and has a feed of nine inches, and will drill up to two inches in diameter in steel.

The net weight of the machine is 700 pounds.

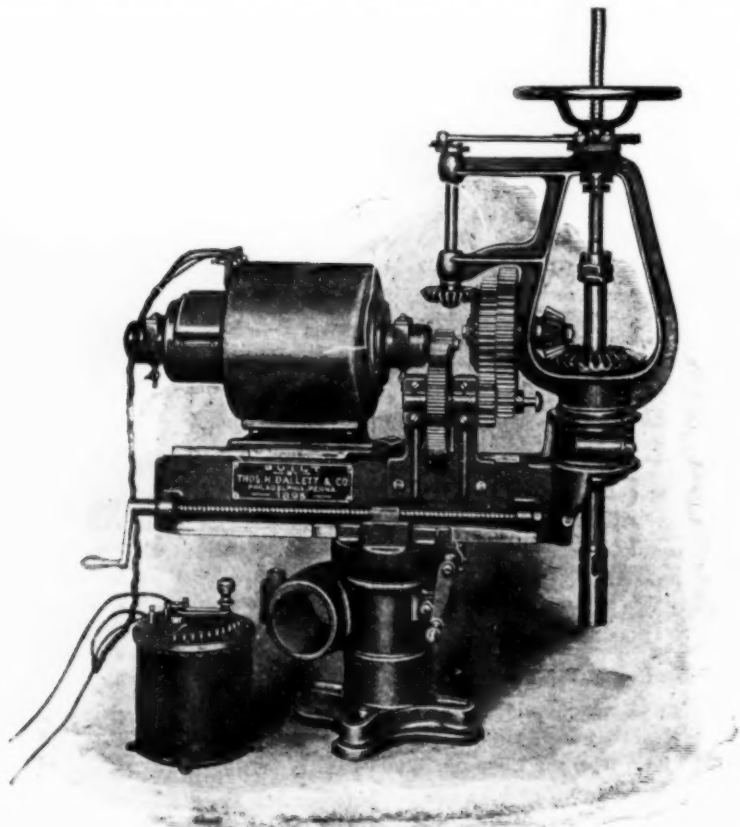
Doig Box-Nailing Machines.

A No. 2 A nailing machine, manufactured by Wm. S. Doig, Brooklyn, N. Y., is shown herewith. This machine feeds and drives nails from one to two inches in length, any gage.

It will nail bottoms on boxes from 6x6 inches, the smallest, up to boxes measuring 14x20 inches.

This machine was selected by the Commissioners of Patents and exhibited at the Chicago World's Fair as showing the greatest progress in machinery manufacture, "marking a distinct advance in invention."

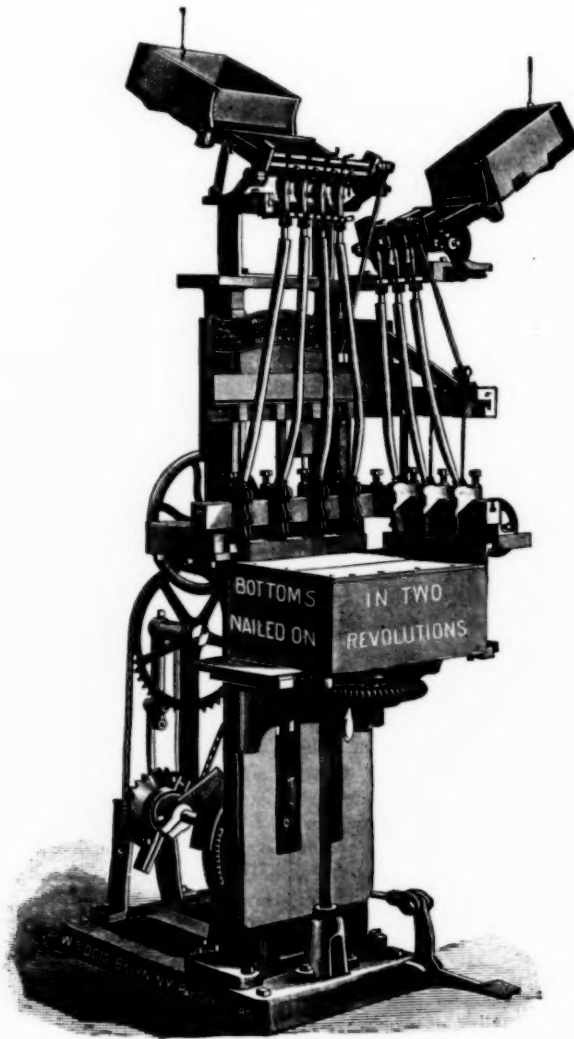
The Doig box-nailing machines are recognized as standard. They are manufac-



NO. 4 PORTABLE ELECTRIC DRILL.

proved patented attachments, considered indispensable to a complete general purpose gap shear for light and heavy work, are provided. It is said that there are practically no wearing part or parts to get out of order on this shear, the treadle being connected with a compound lever, with segment gears, one on each side, which are attached rigidly to a heavy rock shaft to operate the knife bar. The latter has corresponding rack gear, making the construction of this gap shear. Im-

proved patented attachments, considered indispensable to a complete general purpose gap shear for light and heavy work, are provided. It is said that there are practically no wearing part or parts to get out of order on this shear, the treadle being connected with a compound lever, with segment gears, one on each side, which are attached rigidly to a heavy rock shaft to operate the knife bar. The latter has corresponding rack gear, making the construction of this gap shear. Im-



DOIG BOX-NAILING MACHINE No. 2 A.

shafting is not accessible and where direct electric current can be obtained.

The advantages of a machine self-contained and upon one base are obvious.

The arm of the machine carries a water and dust-proof motor of the Storey pattern, which is direct geared to the press proper.

tured for nailing all kinds of boxes, from the small cigar box to the largest size dry-goods box, as well as berry crates, cheese boxes and lock corner boxes. They can be adjusted to any size box. Machines are also made for lining plug tobacco boxes and caddies. Any kind of nail may be used, whether it be edge

grip-cut, wire, tack, clout, clinch or driven screw. Mr. Doig makes a cigar-box machine which can be run by any small boy or girl. It can be used for framing, bottoming or any other work in which nails three-eighths to one inch long are used. With it, bottoms can be nailed on in two revolutions, saving the price of one machine, one boy and the

Roos Punch & Shear Co., Cincinnati, Ohio. This machine is made with either shorter or deeper throats to suit requirements, with or without a removable lower jaw, and with extension nose piece for punching boiler heads and frames close to corners. It may also be equipped with its own engine. These special features are provided if specified, and give this ma-

chine the under head (simply to straighten the stock), and the board or plank brought to a thickness with the top head, thus obtaining a thicker piece of planed lumber out of the same thickness of rough lumber.

The cylinders are double belted, carrying four knives each. The bearings are extra long and large in diameter.

The headstock carrying the bottom cyl-

equal thickness can be planed at the same time, and stock of very large variation in thickness can be fed without difficulty.

One of the new ideas pointed out in this machine is, that it is the only heavy double surfacer ever built with the bed resting on inclines or sliding wedges.

The bed in this machine is raised either by power or by hand.

The main bed adjusts for the thickness, and is operated by means of a new device, controlled by a lever, which connects the power for raising and lowering the bed on the inclines.

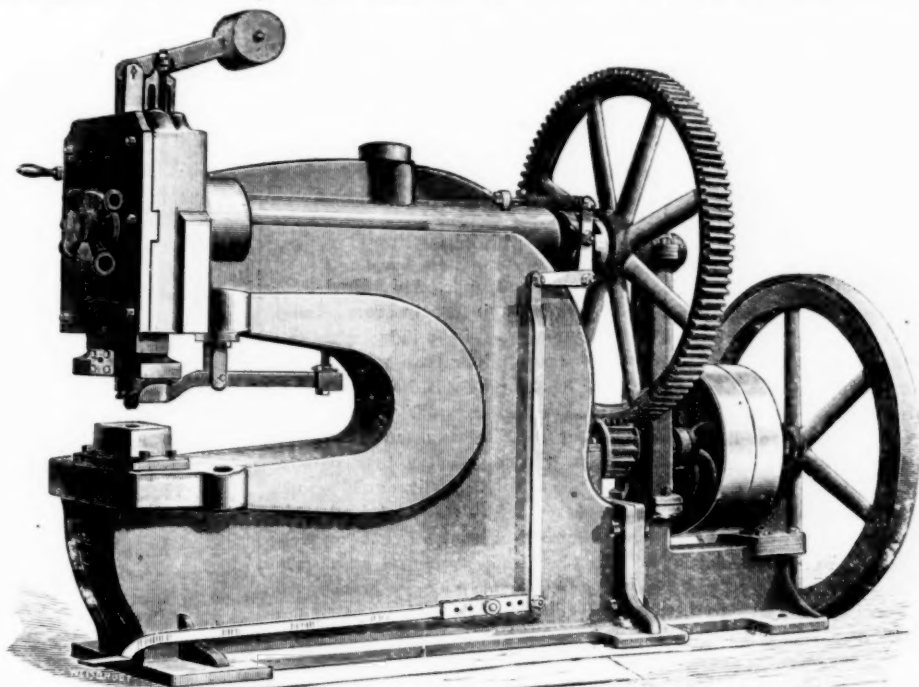
The feed is exceptionally strong, there being six rolls, large in diameter, and all driven by a lately improved and powerful train of gearing.

It has four rates of feed, which are under the control of the operator at all times. By means of a lever the feed can be regulated so that when running on the fast feed and it is desired to decrease the feed to plane slowly over a bad, knotty or cross-grained spot in the lumber, by a simple movement of lever the feed on this machine can be reduced one-half until the imperfect spot has been planed; then, by reversing the lever, the speed is immediately increased to its full capacity. This is another of the new ideas in this machine, and it must be recognized an excellent feature, for when lumber is planed at the same rate of feed throughout, the knotty or cross-grained portion will be more or less chipped out, thus decreasing the grade of the lumber; hence, lumber that can be planed slower over the imperfect parts will be planed smooth, and the grade of the finished product will be enhanced.

The Rowley & Hermance Co., Williamsport, Pa., is the manufacturer.

Louisiana Sulphur Ready for Market.

A dispatch from Sulphur City, La., states that the Louisiana Sulphur Mining Co., which is extracting the sulphur from the large bed in that vicinity by the



BOILERMAKERS' PUNCH.

space required for an extra machine.

The same relative advantages are claimed for the entire line of machines produced by Mr. Doig.

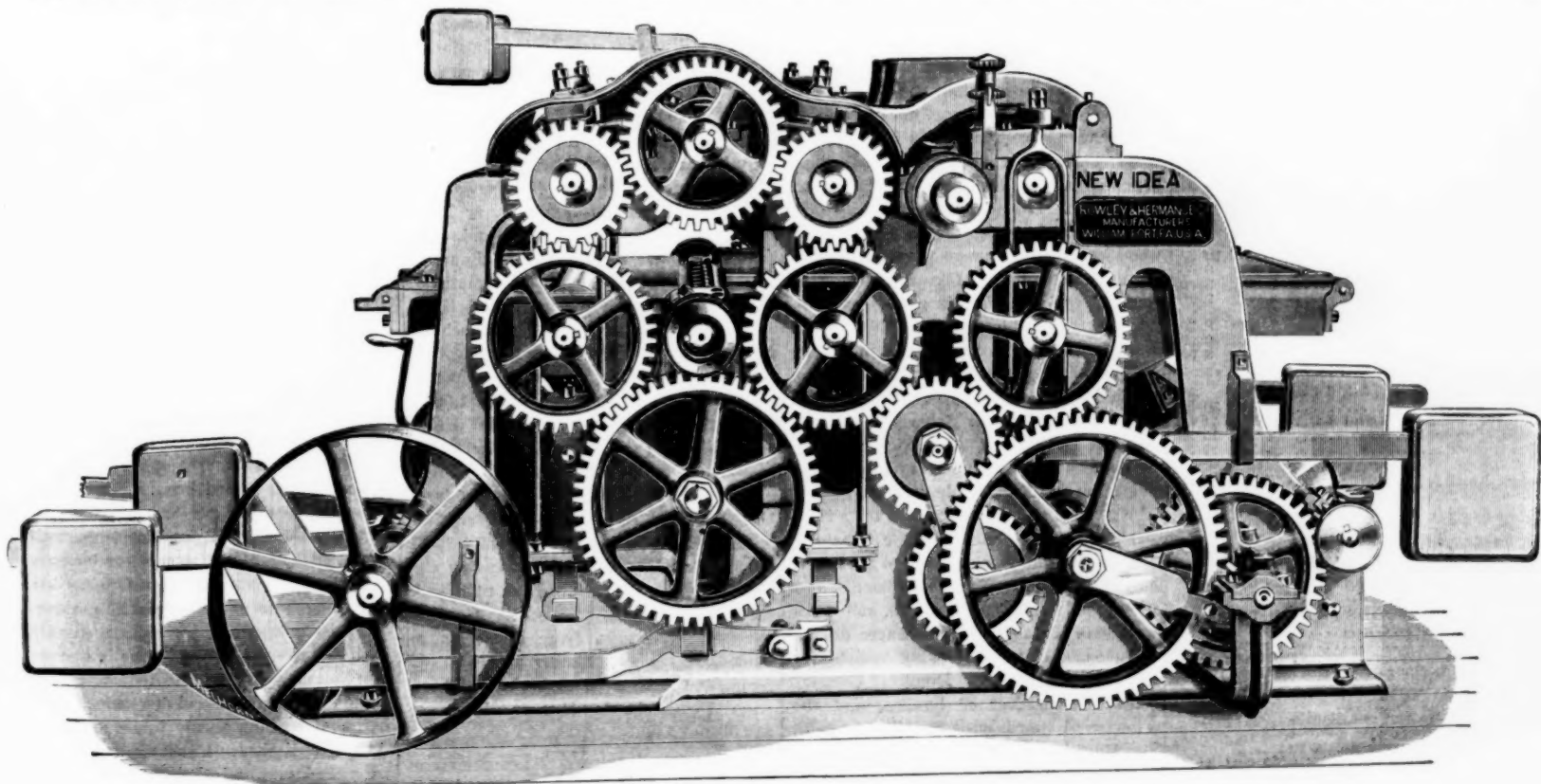
The Doig machines have received medals and diplomas for the most perfect nailing machines made, including almost every important exposition since Mr. Doig secured his patents. He is now the

chine a wide range of usefulness. The reputation of the manufacturers in the production of this class of machinery is evidence of the satisfactory work it will turn out.

"New Idea" Surfacers.

This machine has been designed for doing perfect work on band or roughly

under is so arranged that it can be drawn out for setting or sharpening the knives, and by a novel contrivance the headstock is, when pushed back in place, automatically clamped and held firmly in place, when the machine is ready for operation without further adjustment. This cylinder has a vertical adjustment on inclines, giving it solid bearings. To regulate the



"NEW IDEA" SIX-ROLL DOUBLE SURFACER.

largest manufacturer of this line of machinery in the country.

Boilermakers' Punch.

We illustrate herewith a machine whose effectiveness has secured for it recognition as an important piece of standard equipment. It is the No. O boiler punch, with 42-inch throat, made by the Wais &

sawed lumber of any description. The under cylinder is placed in front and planes the under side of the board before it enters upon the main bed of the machine, thus taking off the humps and crooks, and allows the lumber to rest level on the bed while the top head is planing the top surface. By this method a lighter cut, it is explained, can be taken with

cut of the lower cylinder there is attached and made a part of the main bed an auxiliary bed from the in-feeding end of the machine to the cylinder. This bed carries the first lower roll and chip-breaker for the cylinder, and is adjustable by means of screws.

The two top in-feeding rolls and chip-breakers being divided, two pieces of un-

Fraser pumping process, is preparing to ship a large quantity of its product to market by water. The representatives of the company have been visiting Sabine Pass, Texas, with this end in view. It is stated that so much sulphur is now being obtained that the company calculates to load 1000 tons on vessels every ten days.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

Lumber Directory.

Readers of the Manufacturers' Record who may be in the market for lumber of any description are recommended to the directory of Southern lumber manufacturers and dealers which appears among the advertising pages.

LUMBER MARKET REVIEWS.

Baltimore.

Office Manufacturers' Record.

Baltimore, Md., June 25.

During the past week the local lumber market has been remarkably quiet, with little or no demand from any source. Receipts of air-dried yellow pine have been quite liberal, and there is at present a market overstocked, the sales recorded being at ruinous prices. Boxmakers and yardmen are amply supplied at present, and planing mills are not in the market to any extent. There has been more doing in kiln-dried North Carolina yellow pine, and the demand from out-of-town buyers is more active. White pine is steady, with a good supply on hand and prices very low indeed. Cypress is dull, with a fair supply and prices easy and lower. The hardwood market is at present very quiet, and while there is some inquiry, both from local and out-of-town buyers, the demand is light. The export trade is unchanged, and, as the Hardwood Association has restricted the output, there is now very little going forward except on actual contract. Shippers now usually cable to European markets to hold their lumber and timber in the event of low prices. It is thought that by a partial shutting down of the mills there will be a revival in the near future.

The following list represents the prices current at this date:

[The quotations for yellow pine are for cargo lots, and for all hardwoods the figures indicate values for choice car lots.]

VIRGINIA AND NORTH CAROLINA PINE		
5-4x10 No. 2, kiln dried.....	16 00@	18 00
5-4x12 No. 2, kiln dried.....	17 50@	18 50
4-4x10 No. 1, kiln dried.....	15 00@	15 50
4-4x12 No. 1, kiln dried.....	16 00@	16 50
4-4 nar. edge, No. 1, kiln dried.....	13 50@	14 00
4-4 wide edge, No. 1, kiln d'd.....	17 50@	18 50
6-4x10 & 12, No. 1, kiln dried.....	23 00@	24 00
4-4 No. 1 edge floor, air dried.....	13 50@	14 50
4-4 No. 2 edge floor, air dried.....	10 50@	11 50
4-4 No. 1 12-in. stock, air dried.....	14 50@	15 50
4-4 No. 2 12-in. stock.....	12 50@	13 50
4-4 edge box or rough wide.....	8 50@	9 50
4-4 edge box do. (ord. widths).....	7 50@	8 50
4-4 edge box do. (narrow).....	6 50@	7 50
4-4 12-inch rough.....	9 00@	10 00
3/4 narrow edge.....	5 00@	6 00
3/4 wide.....	7 00@	8 00
3/4x9 1/2 and 10 1/2-inch.....	8 00@	9 00
Small joists, 2 1/2-12, 14 and 16 long.....	7 50@	8 50
Large joists, 3-16 long & up.....	8 50@	9 00
Scantling, 2x3, 2x4 and 3x4.....	8 00@	8 50

WHITE PINE.

1st and 2d clear, 4-4, 5-4, 6-4 & 8-4.....	48 50@	50 50
3d clear, 4-4, 5-4, 6-4 and 8-4.....	43 50@	44 50
Good edge culls.....	14 50@	15 50
Good stock.....	16 50@	17 50

CYPRESS.

4-4x6, No. 1.....	18 50@	20 50
4-4x6, No. 2.....	12 50@	14 50
4-4x6, 16 feet, fencing.....	11 50@	12 50
4-4x6, rough.....	9 00@	10 00
4-4 rough edge.....	8 00@	9 00
4-4 edge, No. 1.....	16 00@	18 00
4-4 edge, No. 2.....	11 00@	12 00
Gulf, 4-4, Nos. 1 and 2.....	28 50@	30 50
Gulf, 6-4, Nos. 1 and 2.....	31 50@	32 50

HARDWOODS—WALNUT.

5-8, Nos. 1 and 2.....	65 00@	75 00
4-4, Nos. 1 and 2.....	80 00@	90 00
5-4, 6-4 and 8-4.....	85 00@	95 00
Newell stuff, clear of heart.....	85 00@	100 00
Culls.....	20 00@	30 00

OAK.

Cabinet, white and red, Southern, plain-sawn and good, 1 and 2, 8 inches and up, 12 to 16 feet long, 4-4.....	30 00@	34 00
Quartered white, Western, 1 and 2 quality, all figured, 6 inches and up wide, 4-4.....	53 00@	55 00
Culls.....	10 00@	15 00

POPULAR.

Nos. 1 and 2, 5-8.....	24 50@	25 50
Nos. 1 and 2, 4-4.....	28 00@	30 00
Nos. 1 and 2, 6 and 8-4.....	32 50@	33 50
Culls.....	13 00@	16 00

SHINGLES.

Cypr., No. 1 h'ts, sawed, 6x20.....	7 25@	7 75
No. 1 saps, sawed, 6x20.....	5 50@	6 50
No. 1 hearts, shaved, 6x20.....	6 50@	7 50
No. 1 saps, shaved, 6x20.....	5 25@	5 50

LATHS.

White pine.....	2 70@	2 75
Spruce.....	2 15@	2 25
Cypress.....	2 15@	2 25

Charleston.

[From our own Correspondent.]

Charleston, S. C., June 22.

The lumber market continues fairly active, with values steady, and shipments, both here and at Georgetown, are active. In fact, at all nearby milling points business in every department of the lumber industry is fair. Manufacturers, however, expect a much greater volume of business during July and August, and as there are numerous inquiries coming to hand, considerable actual business will result therefrom. Mills at Georgetown and other points are running on full time and have orders sufficient to keep moving for some time to come. Prices for the better grades of lumber continue steady, but for common grades the market is easy, with less demand. The following quotations are current at this date: Merchantable lumber, \$14 to \$16 for city-sawn, \$12 to \$14 for railroad; square and sound, \$9 to \$13 for railroad, \$8 to \$11 for raft; dock timber, \$4.50 to \$6.50; shipping, \$8.50 to \$10.50. Shingles are moving freely, and are steady at \$5 to \$7 per thousand. Among the clearances of lumber cargoes during the past week the following vessels are reported: Schooner Clara A. Phinney for New Haven with 327,000 feet of lumber; schooner Pasadena for Boston with 468,000 feet, and schooner Sylvia C. Hall for Bridgeport, Conn., with 228,000 feet. The steamer Algonquin for New York took out 8000 feet among her cargo. The following lumber charters are reported in New York this week: A schooner, 577 tons, from Charleston to New York at \$4.62 1/2 on lumber, 15 cents on railroad ties and \$4 per thousand on switch ties; a schooner, 371 tons, from Charleston to Philadelphia at \$4.25, coal out at 75 cents, and a schooner, 475 tons, from Charleston to New York at \$4.37 1/2.

Savannah.

[From our own Correspondent.]

Savannah, Ga., June 22.

The activity in the local lumber market noted during the week ending the 15th inst. still continues unabated, and the demand for lumber from Northern sources is brisk. The cross-tie industry has shown up much better this season, and there is a good demand from railroads making improvements. The stave trade is also improving, and the foreign inquiry is good, large shipments being booked for July and August. As to prices for lumber and all wood products, the range of values is generally firm, and manufacturers expect a slight advance on certain grades of lumber. At all milling centres there is a good business in progress, and mills are well supplied with orders, while stocks do not accumulate to any great degree. The shipments of lumber from the nearby ports of Darien and Brunswick continue to make a good showing, and both the domestic and foreign demand is active. The general market closes firm for all desirable grades of lumber at the following figures: Ordinary sizes, \$11 to \$12; difficult sizes, \$13 to \$18; flooring boards, \$15 to \$22; shipstuffs, \$16.50 to \$20, and sawn ties, \$10. Among the clearances during the past week the following vessels are reported: Schooners Douglas Gregory with 481,823 feet of lumber, and the Thomas G. Smith with 398,151 feet, both for Baltimore; the schooner Stephen G. Loud for Boston with 316,578 feet of pitch-pine lumber and 100,000 feet of cypress lumber, and the schooner Carrie T. Belano with 445,306 feet for the same port. The schooner Napoleon Boughton cleared for New York with 18,280 railroad cross-ties, measuring 658,080 superficial feet, and the schooner Annie C. Grace for Philadelphia with 372,056 feet of pitch-pine lumber. New York steamers took out 262,961 feet of lumber; Baltimore steamers, 362,170 feet, and Boston steam-

ers, 102,620 feet. The market for lumber charters is steady, with rates unchanged. The rates from this and nearby ports in Georgia are quoted \$4.25 to \$5.50 for a range including Baltimore and Portland, Maine; steamer rates to New York and Philadelphia \$7, to Boston \$8, and Baltimore \$5. To the West Indies and South American ports rates are unchanged. The following charters are reported in New York this week: A schooner, 461 tons, from Brunswick to Boston at \$4.62 1/2; a Haytian brig, 126 tons, from Brunswick to Port-au-Prince on private terms; a schooner, 488 tons, from Brunswick to New York at \$4.25, and a schooner, 507 tons, from Brunswick to New York at \$4.50, out in ballast.

Mobile.

[From our own Correspondent.]

Mobile, Ala., June 22.

The movement in nearly every branch of the lumber and timber industry at this port has been lighter than usual during the past week. There is, however, a fair demand for timber, and, with the improvement in European markets, there has been a corresponding tone in local values. Sawn timber is firm at 11 1/2 to 12 cents per cubic foot, 40-foot basis, and hewn timber will bring 12 cents on basis of 100 cubic feet, average B1 good. The demand for lumber is not so pronounced, there being very little business coming from West India, Central or South American markets. Later on it is expected a good demand will set in. During the past week the bark Antwerp cleared for Greenock with 30,667 cubic feet of hewn timber, 30,532 cubic feet of sawn timber and 20,761 superficial feet of lumber. The steamer Laurel Branch cleared for Greenock with 163,550 cubic feet of sawn timber and 107,760 feet of lumber, and the steamer Tordenskjold for Boca del Toro with 17,733 feet of lumber. The total exports of lumber from this port from September 1, 1895, to June 19, 1896, were 49,866,750 superficial feet, against 48,514,564 feet last year. At Pensacola there is still a very satisfactory business in progress, and the market continues active, which is somewhat unusual at this period of the season. There is a good supply of sawn timber, and the facilities for bringing it to market are better on account of the late rains, which have caused a rise in the upper streams. Ferry Pass stock is firm at 11 1/2 to 12 cents, and sales have been made a shade higher than the outside figure. The steamship Amethyst cleared for Havana last week with 550,000 feet of lumber and other merchandise, and schooner Orient for Nassau with 104,000 feet. The steamship Capenor cleared for West Hartlepool with 1,005,000 feet of sawn timber and 18,000 feet of lumber, and the schooner Tehwiga for Ipswich Dock with 49,000 superficial feet of sawn timber and 226,000 feet of lumber. The bark Aringda cleared for Hull with 589,000 feet of lumber and 3975 cubic feet of sawn timber. Among the charters reported in New York this week are the following vessels: A German steamer, 1420 tons, from Pensacola to Buenos Ayres with lumber at \$15.25, \$2 form, and a Norwegian bark, 646 tons, from Pensacola to Buenos Ayres at \$12.50 net.

New Orleans.

[From our own Correspondent.]

New Orleans, La., June 22.

The conditions surrounding the lumber industry in this State and points adjacent in Texas, Alabama, Mississippi and Florida have shown no material change during the current month. As a rule the general market has been quiet, the political situation occupying the attention of manufacturers to a great extent. There is, however, a very promising outlook,

and as at this period of the season farmers are occupied with crops, and Northern and Eastern centres as usual undergoing the dull season, the demand is naturally at or near the minimum stage. Already numerous inquiries are coming to hand, both from domestic and foreign markets, and it is expected that the demand from the latter sources will show a great increase over other seasons. This city is now getting ripe for a good export trade in lumber, facilities for shipping are becoming better, and nearly every railroad entering this city expects to do a large carrying trade during the summer and autumn months. The Illinois Central Railroad reports a considerable movement in lumber circles, and already the inquiry comes from Japan, South African and other new markets for rates regarding lumber. A prominent officer of the Northeastern road says: "The mills all along our lines in Mississippi and Louisiana are getting ready to ship, and large consignments are about going forward to Northern markets." In the yellow-pine market matters are beginning to improve, but the demand here is moderate at present, with prices steady. Along the Gulf States business is better, and there is a pronounced improvement at several points. Mills have been generally running on special bills, and for car, railroad and bridge purposes, yellow pine is having its inning. Stocks at all points are ample to meet any improved demand, with a good assortment of grades and dimensions. This is also true of cypress, for which there is an excellent show in the near future. All the cypress mills have been selling pretty freely, and in no case are stocks excessive. With the prospects of bountiful crops the manufacturer is at the moment well situated to meet a demand which may naturally be expected under existing conditions. W. B. Brazelton, of Waco, Texas, who is a director in extensive yellow pine and cypress lumber interests, says: "The tendency to shut down saw mills pervades the region, but we are hopeful of better demand close ahead. We are sending lumber to Mexico, where it is greatly preferred for certain lines of work to the native growth. We also supply orders for the West Indies, and at this time we have agents in Europe hunting up customers, with some success. Lately a Texas lumber dealer felt the African market and got encouragement. Longleaf pine and cypress of the Southwestern States are wanted everywhere the world over. We have been loading coasters this year for the Chicago market. The elevated railways are taking our lumber freely. As to hardwood, ash, oak and hickory lumber is coming into better demand. A saw mill for hardwood has lately been located at the mouth of the Trinity. Texas hardwood had been classed as inferior to Northern growth, but it is getting into the market now on its merits." Real estate and building matters here are in good shape, and, as New Orleans has been long known for its stable and conservative character, investors are making ventures involving large amounts. Development in the city and suburbs is going on in a steady and determined manner, and nothing seems to be overdone. At the Real Estate Exchange the crowds in attendance and their purchases is a fair index of what is going on in this line. As to the building demand for lumber, there is at present much to encourage manufacturers. Among terminal improvements for the shipment of lumber from Mississippi, the Gulf & Ship Island Railroad will be one of great importance. The company is now completing and expects to have in operation by July 1 the line between Hattiesburg and Gulfport. A pier is being built which will extend

4500 feet into the Gulf, where larger vessels can take cargoes without the use of lighters.

Beaumont.

[From our own Correspondent.]

Beaumont, Texas, June 20.

Trade in all departments of the lumber industry is about the same as last reported. Some improvement has been noticed in orders from the dealers, and this is probably due to the rains which have fallen in several portions of the State, which, while not quite in time to save the corn crop in its entirety, will, nevertheless, have quite a good effect, and will enable the farmers to gather a fair corn crop in some sections. In some places, however, letters from the dealers report the corn crop as an entire loss, and in some few instances orders for stock have been canceled, owing to the continued drouth.

The export situation is about the same as last reported also. No new orders of any magnitude have been booked, but this is not for want of opportunity, for schedules are continually presenting themselves for shipment to all parts of the civilized world, did the mills but take them. However, until the plants at this point can make a good-sized decrease of their orders, they will not be in position to book any further export bills.

Timber-sawing for the interior trade is quiet. Nothing new of any magnitude has been booked, with the exception of a large order for material for one of the roads in North Texas, which includes timbers and material for section houses, stations, etc.

The shingle market is still very dull, and one mill could doubtless easily supply all the orders that are coming to the mills located between here and Lake Charles, La. Prices remain the same, although some of the smaller mills are thought not to have that regard for the list which a proper degree of confidence in the association would warrant.

The mills here engaged in the manufacture of sash, doors, blinds and special mill work report a fair volume of business at reasonably good prices.

Mr. F. M. Woorall, staff correspondent of the Northwestern Lumberman, was in the city during the week, and took a run down to Port Arthur before leaving for the East.

Mr. John L. Keith left Tuesday night for New Orleans to attend the meeting of the Cypress and Shingle Association, which convened there Wednesday.

St. Louis.

[From our own Correspondent.]

St. Louis, Mo., June 22.

The convention has absorbed the attention of lumbermen during the past week to a great extent, and the lumber market has been rather quiet. Out-of-town orders are not coming in freely, but as the crop outlook is favorable, it is expected that a good country trade will set in later on. In the yellow-pine trade business is quiet; the spring orders have nearly all been filled, and mills are now getting up a supply for the future demand after current wants are supplied. There has been a fairly active trade doing in white pine, and orders from the country continue to come in freely. There is also a good local trade, and the yards are generally busy. The city retailers are having an excellent trade just now, with a good demand for everything in the way of building material. It is stated that the city assessors have reported over 8000 houses sufficiently damaged by the late tornado to require repairs. There is very little change in the hardwood trade, and in nearly all the yards the usual summer dullness is present. Yardmen are generally purchasing stock to meet a future demand, but are not selling much at the

moment. The demand for oak continues strong, while stocks are in no case excessive. There is a good demand for upper grades of poplar, but common stock is dull. Ash and walnut are moving slowly, and other hardwoods are in only moderate demand. In the sash, door and blind trade the city business is very brisk, and it is expected to continue fairly active all summer. Out-of-town trade in this industry is dull. The receipts of lumber in this market for the week ending the 16th inst. aggregated 1501 cars by rail and 175,000 feet from the lower rivers, against 1350 cars and 658,000 feet for the corresponding week last year. The shipments were 833 cars, against 693 cars a year ago.

Lumber Notes.

Mr. C. E. Ferguson has been appointed receiver for the Ferguson Lumber Co., of Little Rock, Ark. The company has filed notice of the surrender of its charter.

The mammoth furniture factory of Frank S. Atkins at Knoxville, Tenn., commenced operation last week. Sideboards, hat-racks, office furniture, etc., will be manufactured.

A fire broke out on the 14th inst. in the mill yard of Burleson & Dutton at Lake Charles, La., and destroyed their saw mill and 3,000,000 feet of lumber. Total loss \$30,000, with no insurance.

The Robinson Land & Lumber Co., at Chicora, Miss., reports trade quiet for timbers and bill stuff. The company, however, has a good supply of export orders to keep it busy all summer.

It is stated that the Duncan plantation, in Lowndes county, Alabama, is to be purchased by a syndicate of Michigan capitalists. The timber on the plantation is to be utilized for shipment to England.

The schooner Warren Adams cleared and sailed from Sabine Pass, Texas, on the 19th inst. for New York with 543,000 feet of lumber, and the schooner Asa T. Stowell for Tampico with 361,000 feet.

The Millburn-Bass wagon concern at Chattanooga, Tenn., has now completed the renovation of its plant, and also the placing of the machinery, and will begin operations at once. The company will operate the plant in all its branches.

The receipts of lumber at the port of New Orleans for the week ending the 18th inst. amounted to 1,541,000 feet, and from September 1 to June 18 they aggregated 79,640,128 feet, against 67,088,900 feet for the corresponding period last year.

The schooner Iolanthe, loaded by the Reliance Lumber Co., of Beaumont, Texas, and which cleared from Sabine Pass, is now discharging cargo at Vera Cruz, and will return to Sabine Pass and take another cargo to the Mexican port.

The Beaumont Lumber Co., of Beaumont, Texas, is building a new wharf on the site of the old one, which has been torn away, to facilitate shipments by barge. It is 200 feet long, and of sufficient width to stack a large quantity of material on it.

A meeting of lumbermen took place in Houston, Texas, last week, most of them being members of the Texas and Louisiana Lumber Manufacturers' Association. Various matters relating to the industry were discussed, which were not made public.

The planing mill owned by C. C. Cummings, of Manassas, Ga., was destroyed by fire on the 17th inst. A large quantity of dressed and undressed lumber and one flat car lumber laden were destroyed. The amount of the loss is unknown, but is partly covered by insurance.

The Emerson Company, Baltimore, manufacturer of automatic compression dryers, reports the closing of a contract

with T. O. Meeker, Charleston, W. Va., for one of its compression dry-kilns, with a capacity of 12,000 feet of poplar and oak per day.

It is stated that R. Burleigh & Son, of Greenwood, Miss., will shortly locate a spoke and handle factory somewhere on the Mobile & Birmingham Railroad. The territory through which this road passes is rich in all kinds of hardwood adapted for such an industry.

The Loomis-Hart Manufacturing Co., of Chattanooga, Tenn., expects to handle 11,000,000 feet of logs this season. It is stated that its log inspector and contractor has just returned from the logging district of East Tennessee and Virginia, where he has contracted for 8,000,000 feet of timber on the Clinch and Powell rivers.

The timbermen of the Big Sandy valley in Kentucky are beginning to despair of having a June timber run this year. There have been many rains of late, but none of sufficient volume to bring about the desired result. There are something near 75,000 logs ready in the main streams to come in case of good water.

The Oxley Stave Factory at Camden, Ark., was destroyed by fire on the 20th inst. It was one of the largest stave factories in the South. The damage to the building and machinery is estimated at \$15,000, and not less than 1,000,000 staves were burned. The total loss is estimated by the management at \$35,000, covered, however, by insurance.

At a meeting of the Louisiana Cypress Lumber and Shingle Association, held in New Orleans last week, a comparison of stocks on hand showed that there were 20,000,000 feet of firsts and seconds and select cypress lumber on hand, shipping dry. Advice from the Atlantic Coast Cypress Association showed that there are 10,000,000 feet of similar grades in the same condition.

The managers of the Nashville Exposition, to be held in that city during the month of June, 1897, have been much interested in the exhibits of woods, and have called upon the Louisiana Cypress and Shingle Association to form an exhibit. It is likely that at a future meeting of that association a special committee will be appointed, with authority to complete arrangements for an exhibit.

Mr. J. J. Cummings, of Savannah, Ga., principal owner of the tug Bristol, purchased from the Phosphate Mining Co., with associates, will, it is said, shortly incorporate a new enterprise in Savannah. They have leased a wharf, and will use it for a lumber-yard. Mr. Cummings is a large shipper of lumber from Savannah and Brunswick, and will shortly be getting timber down the St. John river and shipping it from Jacksonville, Fla. The syndicate will, if the business justifies it, purchase more tugs for towing lumber.

The following vessels cleared last week from Jacksonville, Fla.: Schooners Josephine for New York with 330,000 feet of cypress lumber; William H. Albury for Hope Town, Abaco, with 30,000 feet of yellow-pine lumber; Cactus for Boston with 433,000 feet of yellow pine; Hallie C. Luce with 430,000 feet of yellow-pine lumber, and the schooner R. T. Rundlet for Salisbury, Md., with nearly 1,000,000 shingles. The Clyde steamers took out 720,000 feet for New York. The total shipments for the week have been the largest for some time past.

An important meeting of the Southern Cypress Shingle Association was held in New Orleans on the 17th inst. for the purpose of discussing the present condition of affairs caused by the shipment of red cedar shingles from the West. These shingles have been shipped in great numbers, and the freight rates, owing to the

light weight of the wood, have been extremely low. The members present at the meeting discussed the amount of stock now on hand, and every effort was made to learn the exact condition of the stock and its quantity. The session was an executive one, but it was learned that none of the mills would be shut down during the season. Every effort will be made to regain the lost trade by putting on the market a shingle which the red cedar shingle of the West cannot manufacture as to size and quality.

Car Wheels and Machinery for Mexico.

[Special Cor. Manufacturers' Record.]

Birmingham, Ala., June 22.

The situation in iron has undergone a change during the past week, inasmuch as the inquiry has very appreciably increased, and actual business shows a corresponding gain. The furnace interest, which credit has been given for shading prices has, it is common talk, reduced stocks to the desired limit, and is no longer counted as a disturbing factor in the maintenance of prices. The most noticeable sale of the week was 3000 tons of soft at current quotations. At the close of week another order for an equal quantity was being negotiated, with every prospect of success. The grades most in demand were foundry and foundry forge and No. 2 soft. The largest interest purchasing is from the manufacturers of farming implements. The added interest manifested in the iron market is taken here as an evidence of a better feeling in the trade. But no one anticipates more than a comfortable business this summer.

Quotations are unchanged at \$8.25 for No. 1 foundry, \$7.75 for No. 2 foundry, \$7.25 for No. 3 foundry, \$7.75 for No. 1 soft, \$7.50 for No. 2 soft, \$8.25 and \$8 for silver gray, \$6.75 for gray forge and \$6.75 for mottled. For basic iron the demand keeps pace with the facilities of supply. At the rolling mills they continue the same reports of a dull business heretofore chronicled, and they see no prospect for a favorable change in the near future. The car-wheel works starts in with orders beyond its immediate present capacity to promptly execute. It has a contract, to run one year, with the Mexican Central Railroad to furnish it with car wheels, and has every prospect for a business that will tax its capacity. The Warrior Machine Works has been full of work for the electric-power plant, and the Hood Machine Co. has been engaged on an order to go to Mexico. Other industries limiting their efforts to local interests are busy on contracts heretofore reported. The week has developed no new contracts worth mention. The board of directors of the Auditorium, at a called meeting to be held early this week, will let the contract for building it. The new oil mill has reached the second story in the course of construction, and its readiness for this season's crop is well assured. At Anniston the pipe and foundry company shipped a solid train of its specialty, pipe, to the East. In the Arbucocochee gold district fresh ventures are being made in gold-mining. The mine on the Wise property there, purchased by parties from Heflin and Atlanta, which develops high-grade and paying dirt, will be worked with vigor. Over in Marion county, near Hamilton, parties representing a West Virginia firm have taken an option on 15,000 acres of land and are prospecting for gas and oil. Over at Brewton negotiations are pending for a chair factory. Not a week passes by that does not add something to the list of industries in this district. The progress of preparation for the inauguration of steel-making by the Hawkins process is closely watched by the trade here, as the owner claims it will revolutionize steel-making.

CONSTRUCTION DEPARTMENT.

THE MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

* Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

ALABAMA.

Arbacoochee—Gold Mine.—R. E. Merrill, of Heflin, Ala., is developing a gold mine.

Birmingham—Compress.—J. S. Akers, W. H. Inman, W. A. Robinson and others have incorporated the Birmingham Compress Co., with a capital stock of \$15,000.

Brewton—Chair Factory.—H. W. Hugger and E. M. Rogers will establish a chair factory.

Hamburg—Ginnery, etc.—John L. Crenshaw has completed a grist and saw mill.

Hamilton—Gas and Oil Developments.—George W. Price, of West Virginia, has leased 15,000 acres of oil and gas lands near Hamilton for Z. G. Morgan & Co., who will develop.

Pinchill—Saw Mill.—W. H. Haddox has erected a saw mill.

Selma—Sausage Factory.—Jonce L. Gardner intends to establish a sausage factory.*

Talcott—Saw Mill.—Spencer Bros. have lately erected another saw mill of 15,000 feet daily capacity.

Talcott—Saw Mill.—The Hamilton Lumber Co. is putting in a new planer and other machinery.

ARKANSAS.

Fort Smith—Iron Works.—Jeremiah W. Smith, of Athens, Ga., is negotiating for an interest in the Vulcan Iron Works, and if successful in closing same will enlarge the plant.

FLORIDA.

Apalachicola—Saw Mill.—It is reported that a saw mill of large capacity will be erected near Apalachicola by English capitalists.

Pensacola—Water System.—Louis Boley, W. H. Kilbee and Charles Krueger have incorporated the Escambia County Water Works Co. to supply water to city and county; capital stock placed at \$50,000.

Port Tampa City—Railroad Repair Shops, Car and Locomotive Works.—A dispatch from Tampa says that it is understood that in the event of fresh water being secured by the boring now in progress at Port Tampa City, that the general shops of the Plant system will be removed to Port Tampa City. It is also said that not only would the rolling stock be repaired at the plant, but that works for manufacturing locomotives and cars would be added. No confirmation of these reports has as yet been received. H. B. Plant, of New York, is president.

St. Petersburg—Saw Mill, Laundry, etc.—L. H. Barbere will establish a grist mill, steam laundry and wood-yard.

GEORGIA.

Americus—Blacksmith Shop.—Lockett & Son will build a blacksmith shop.

Atlanta—Gas Tank.—The Atlanta Gas

Light Co. is erecting a gas tank 125 feet in diameter, 130 feet high, and with capacity of 1,000,000 feet. R. D. Wood & Co., of Philadelphia, Pa., have the contract.

Cartersville—Cotton Compress.—There is a movement to remove the compress at Luverna, Ala., to Cartersville. Geo. W. Dwell, of Savannah, owns the plant, and proposes the formation of a \$25,000 company to operate the press.

Columbus—Electric Plant.—The Columbus Railroad Co. has closed a contract for the erection of a duplicate electric-power plant, to cost \$50,000; will also put in two large additional water-wheels, so as to supply power to small manufactories.

Hawkinsville—Electric Lighting and Water Plants.—The city vote on issuing bonds for electric-light and water plants has resulted affirmatively. Address the mayor.

Macon—Machine Shops.—Negotiations are under way for locating a large machine-shop plant.

Macon—Glassware Works, etc.—Chartered: The Fine Arts Glass & Decorating Co., with capital stock of \$100,000, to print, decorate and manufacture glassware. Incorporators are Sidney E. Clark, James Budd and D. S. Fletcher, of Hartford, Conn., and Albert Freeman, of New York. Attorneys for company are Messrs. Allen & Jones, Macon, in whose care letters may be addressed.

Rockmart—Slate Mill.—The Georgia Slate Co. is having plans made for a new slate mill.*

Rome—Rolling Mill.—S. Mays Ball, of Atlanta, Ga., is the lessee of the Rome Rolling Mill, already noted as to resume operations. New machinery has been put in, and more will be added.*

KENTUCKY.

Empire—Saw Mill and Timber Lands.—P. P. Swife, of Nashville, Tenn., has purchased 1800 acres of timber land near Empire, and will locate a saw mill for cutting lumber.

Henderson—Bicycle Works.—Isaac Zimbro, Jr., is mentioned in connection with a report of proposed bicycle works.

Louisville—Clay Manufacturing.—F. R. Burrell and others have incorporated the Burrell & Walker Manufacturing Co., with a capital stock of \$10,000. (Will continue the business of N. U. Walker Clay Manufacturing Co.)

Newhaven—Telephone System.—The Newhaven Telephone Co. has been incorporated by Sylvester Rapier, Francis Bowling and others.

Preston—Oil Well.—Jesse Barnes has sunk an oil well.

LOUISIANA.

Crowley—Ice Plant.—The Plaquemine Ice Manufacturing Co. will remove its plant to Crowley.

Lecompte—Sugar Plant.—J. H. Meeker is making improvements to the Home Sugar Refinery, including three more rollers and other machinery.

New Iberia—Water and Light Plants.—The construction of light and water plants is said to be contemplated by W. R. Burke.

St. Joseph—Planting Company.—The Helena Planting Co. has been incorporated, with a capital stock of \$10,000, for conducting plantations, etc.; William Moss, president; Charles Wise, treasurer, and M. E. Heller, manager.

White Castle—Ice Plant.—The erection of an ice plant is proposed.*

MARYLAND.

Annapolis—Glass Works.—There is a movement afoot to put in operation the glass works at Eastport, opposite Annapolis. L. H. Rehn owns the plant. John J. Kelly, of Baltimore, is said to be interested in the reorganization proposed.

Hagerstown—Water Supply.—The Hagerstown Water Co., mentioned last week, will expend about \$30,000 on the improvements noted.

Hagerstown—Bicycle Works.—The Crawford Manufacturing Co. will enlarge its plant.

Hagerstown—Silk Mills.—Rudolph Cohen, of New York city, has purchased from A. P. Connor the machinery in the plant of the Maryland Silk Mills, and has an option of ninety days on the mill. An endeavor will be made to arrange for operations and adding a silk-throwing plant, to employ 100 hands.

Hyattsville—Electric-power House.—The

Columbia & Maryland Railway has let contract to Henry Smith & Son, of Baltimore, at \$81,500 for the erection of the building for its power plant. The structure will be located near Hyattsville, and be 130x250 feet in size. Machinery has been ordered, consisting of four direct-coupled generators and four steam engines, each of 1000 horsepower, ten boilers of 150 horsepower each, etc.

Washington, D. C.—Artesian Wells.—The health officer of Washington is preparing plans for fifteen artesian wells to be drilled for the city; cost to be about \$4000.

Williamsport—Bridge.—The movement for the construction of a bridge across the Potomac river has been revived. About \$40,000 is estimated cost of structure.

MISSISSIPPI.

Greenville—Telephone Company.—The Mutual Telephone Co. has been organized by Lamar Watson.

Greenwood—Handle Factory.—R. Burleigh & Son will locate a spoke and handle factory on the Mobile & Birmingham Railroad.

Jackson—Blacksmith Shop, etc.—Contract has been let to C. E. Mackey, of Vicksburg, Miss., at \$5835 for the erection of dormitory and blacksmith shop.

Vicksburg—Ginnery.—S. L. Jordan, of Boston, Mass., will erect a ginnery in Vicksburg.

MISSOURI.

Kansas City—Grain Company.—E. L. Dehoney and others have incorporated the Dehoney Hay & Grain Co., with capital stock of \$10,000.

St. Louis—Mercantile.—The C. L. Buschman Grocery Co. has been incorporated, with a capital stock of \$30,000, by H. W. Buschman and others.

NORTH CAROLINA.

Charlotte—Cordage Factory.—H. J. McLaurin, Jr., E. D. Latta, H. S. Chadwick, W. G. Stone, J. W. Heard, William Anderson and Joseph Graham will organize a company to establish a plant for manufacturing cordage, webbing, back bands, etc.; capital stock to be \$12,000.

Concord—Cotton Mill.—According to report, a \$50,000 cotton-mill company is being organized. J. L. Hartsell is said to be interested.

Forest City—Cotton Mill.—The Florence Cotton Mills will change from a yarn mill to a weave mill. An additional building will be erected during the summer and new machinery put in by fall.

Laurel Hill—Cotton Mill.—The Springfield Cotton Mills will put in new cards.

Park County—Gold Mines.—Cincinnati parties have bought mineral rights in 640 acres of land in Park county, and it is said will organize a \$100,000 company to develop it. The property is known as the Double Branch mines, and is located near Asheville.

Plumtree—Corn Mill.—C. W. Burleson & Son will erect a corn mill.*

Salisbury—Gold Mine.—C. G. Lanier is developing the Reimer gold mine for the J. B. Lanier heirs.

Scotland Neck—Lumber Plant.—John Coughenour has commenced rebuilding his \$18,000 lumber plant, which was recently burned.

Scotland Neck—Barrel Factory.—It is stated that a hoghead factory will be established.

Yadkinville—Cotton Mill.—It is reported that a \$300,000 cotton mill will be built on Yadkin Shoals. George W. Hinshaw, of Charlotte, is said to be interested.

SOUTH CAROLINA.

Charleston—Mercantile.—The Kerrison Dry Goods Co. has been incorporated, with capital stock of \$4000; Edwin H. Poulnot, secretary.

Charleston—Commission Company.—The John C. Ferguson Co. has been incorporated, with capital stock of \$4000.

Edgefield—Rice Mill.—Joe Holland is reported as to build a small rice mill.

Florence—Grain Mill.—B. C. Lambert is adding new machinery to his mill.

Gaffney—Cotton Mill.—A company will be organized to build a 10,000-spindle mill for using Sea Island and Egyptian cotton, spinning fine numbers from 100s to 150s; then to be woven into fancy cotton goods. The company will probably be known as the H. D.

Wheat Co., and H. D. Wheat can be addressed for information.

Spartanburg—Ice Plant.—An ice factory will be erected, as reported last week. White Bros. will own and operate it, and have let contracts for machinery.

Spartanburg—Well-Fixture Works.—The Southern Well Fixture Co. has been organized by I. R. Padgett and others to manufacture a new device for drawing water from wells.

St. Matthews—Cotton Mill.—F. J. Buyck, J. E. Wannamaker and S. Rich will build a cotton mill.

TENNESSEE.

Chattanooga—Bridge.—The Chattanooga Co., Limited, is moving for the construction of a bridge across the Tennessee river.

Crooked Fork—Coal Mines.—The Crooked Fork Coal Co. has opened a new coal mine.

Franklin—Flour Mill.—Parman Bros. have completed their 100-barrel flour mill.

Jackson—Laundry.—Henry Johnson and Mat Boutin have leased and will operate the White Star Steam Laundry.

Jackson—Electric-light Plant.—J. H. Hunter, president of the Jackson & Suburban Street Car Co., has completed financial arrangements for the establishment of electric-light plant.

McGhee—Stone Quarry.—Condon & Monday, of Knoxville, will open a stone quarry at McGhee.

Memphis—Sewerage System.—The city council is considering extensions to the city sewerage system; Mr. Elliott, city engineer.

Mossy Creek—Woolen Mill.—The Mossy Creek Woolen Mills is putting in twelve new looms.

Nashville—Telephone System.—The Southern Telephone Co. has been incorporated for establishing telephone systems, etc.

Sherwood—Saw Mill.—Gregory & Bugg will put in new machinery in the near future.

TEXAS.

Comanche—Mercantile.—Chartered: The Kansas City Dry Goods Co., with a capital stock of \$25,000, by Eugene Greer and others.

Galveston—Grain Elevators.—The Galveston Wharf Co. will erect and operate two grain elevators, one of 500,000 bushels and the other of 100,000 bushels capacity; larger one will be used for ordinary grain handling, smaller for cleaning and conditioning; cost will be about \$200,000.

Garrison—Coal Mines.—Z. B. Garrison, lately noted as to open mines, has formed the Garrison Coal Co. to push developments. H. D. Garrison is president; J. T. Garrison, secretary, and J. D. Garrison, engineer and manager. Tracts of coal lands of 2360 acres have been bought and leased, and operations will be pushed. A shaft is now being opened.*

La Grange—Ice and Cold-storage Plant.—Wm. J. Lemp, Jr., Henry Vahlkamp and A. Ruemell, of St. Louis, Mo.; C. Kruechel, of La Grange, and others have incorporated the La Grange Ice & Cold Storage Co. to manufacture ice, bottle beer, etc.; capital stock placed at \$30,000.

Rockdale—Coal Briquette Plant.—The Texas Coal Briquetting Co. has purchased 140 acres of lignite coal lands from the Rockdale Mining & Manufacturing Co. for \$12,000, and will probably soon erect the proposed plant for briquetting coal.

San Antonio—Sewers.—The city has awarded contract to the Greenville Construction Co. for the construction of sewers; will cost about \$228,736.28.

Sulphur Springs—Mercantile.—S. S. Sheppard and others have incorporated the Star Mercantile Co., with capital stock of \$8000, for mercantile purposes.

Waxahachie—Cotton Mill.—A company has been organized to build a \$10,000 cotton mill.

VIRGINIA.

Alexandria—Beef-extract Works.—The Virginia Beef Extract Co. has been incorporated, with James C. Kerr, president; E. L. Whitford, treasurer, and L. B. Clark, secretary. A plant for manufacturing for market extract of beef has been established; will use a process invented by Professor Ross, of the University of Michigan, and patented by Walter S. Hicks, of Detroit.

Basic City—Furnaces, Iron-mining, etc.—Chartered: The Basic City Furnace Co., capital stock \$50,000 and privilege of increasing to \$250,000, for the purpose of manufacturing iron and steel, mining iron, etc. Wm.

M. Kaufman, of Reading, Pa., is president; M. H. Leonard, of Philadelphia, Pa., secretary, and Daniel H. Wingerdof, Reading, Pa., treasurer. The Bare ore bank has been purchased and will be developed.

Castlewood—Iron Mines.—S. C. Dickenson will open iron-ore mines.

Flinthill—Silver Mines.—The Flinthill Mining Co. has been chartered at Alexandria for the purpose of developing silver mines in Virginia. It is said that Wm. M. Stewart (United States senator), of Virginia City, Nev., is interested in the company.

Lynchburg—Creamery.—There is a movement on foot for the establishment of a \$4000 cooperative creamery for benefit of the farmers.

Lynchburg—Baseball Factory.—There is talk of a baseball factory being established by Jacob Wynn.

Newport News—City Improvements.—The city council has directed J. K. M. Newton, city attorney, to draft an ordinance authorizing a vote as to issuing \$90,000 in bonds for improvements, as follows: \$60,000 for improvements to streets and city jail, construction of an overhead bridge of iron, sewerage system; \$30,000 for school buildings, etc. Address the mayor.

Norfolk—Mercantile.—The Brown Bros. Co. has been incorporated, with capital stock of \$5000, for mercantile purposes; C. O. Brown, president; A. L. Childress, vice-president, and Willis Brown, secretary.

Richmond—Oil Wells, etc.—The Appalachian Oil Co. has been chartered, capital stock \$30,000, to develop oil and mineral lands leased in Virginia and West Virginia; W. M. Bridges, president; Joseph B. Montgomery, treasurer, and Thomas H. Fox, secretary.

Rossmore—Springs Company.—Chartered: The Virginia Mineral Springs Co., capital stock \$50,000 and privilege of increasing to \$1,000,000; R. H. Woodrum, president; C. H. Vines, vice-president, and Herman Crueger, secretary.

WEST VIRGINIA.

Cedar Cliff—Cement Plant.—The Cedar Cliff Cement Co.'s plant, consisting of mill and 140 acres of land with fine cement formation, has been sold to Thomas S. Kean, of Cumberland, Md., at \$8900.

Davis—Tannery.—The United States Leather Co. will increase the output of the Laidlaw tannery one-half.

Grafton—Iron Foundry, etc.—John Carr will erect, it is stated, a new machine shop and foundry.

Morgantown—Glass Works.—The Morgantown Building & Investment Co. has raised a guarantee of \$20,000 to ensure the removal of a Fosteria, Ohio, glass plant to Morgantown. The glass company is to employ 250 men and distribute \$100,000 in wages yearly.

New Martinsville—Water Works.—If the vote for bonds for water works carries next week, E. F. Millar, of Wheeling, will prepare the plans for the plant.

Parkersburg—Electric Plant.—The Ohio River Railroad Co. will build a power-house of 200 horse-power.

Philippi—Oil Wells.—S. C. Douglas, J. F. Woodford, J. H. Knapp, of Philippi, and M. E. Lawson, of Genesee, Ohio, have incorporated the Elk City Oil & Gas Co., and will develop for oil and gas 8000 acres of land lately leased.

Sistersville—Electric Plant.—Johnson & Wood, of Pittsburgh, Pa., will erect an electric-light plant in Sistersville; will commence work at once.

Sistersville—Electric-light Plant.—McGhie & Moore, who were granted franchise for electric lighting some months ago, have contracted for a complete plant.

BURNED.

Algiers, La.—The Algiers Water Works plant damaged.

Algiers, La.—The Algiers ice plant damaged to extent of \$10,000.

Bloom, Va.—J. Frank Mason's saw mill. Lake Charles, La. (near.)—Burleson & Dubon's saw mill; loss about \$15,000.

Laredo, Texas.—The car sheds and round-house of the International & Great Northern Railroad; loss reported as near \$100,000; T. M. Campbell, manager, Palestine, Texas.

Manassas, Ga.—C. C. Cummings's saw mill.

New Orleans, La.—The Wiese Soap Factory, J. J. Wiese, proprietor; loss \$4000.

Tallahassee, Fla.—Captain Lutterloh's turpentine still.

A World's Fair medal and diploma has been received by the National Pipe Bending Co., New Haven, Conn. These honors were awarded by a board of international judges for the exhibit made by this concern.

BUILDING NOTES.

Atlanta, Ga.—Office Building.—W. W. Austell's big office building, reported during the week, will be constructed at Atlanta, and not Augusta, as was stated.

Atlanta, Ga.—Temple.—The Atlanta Masonic Temple Co. (address care of H. C. Stockdell) will at once arrange for awarding contracts for its Masonic Temple. Bruce & Morgan's plans for 10-story structure are now on hand; cost to be \$200,000.

Atlanta, Ga.—Jail.—The county commissioners have abandoned entirely the plans for the new jail furnished by competition and have adopted those made by Grant Wilkins. The jail will cost not more than \$150,000, and Mr. Wilkins will superintend construction of same.

Augusta, Ga.—Field & Kelly will erect a large building.

Augusta, Ga.—Store.—D. Slusky will build a store, three stories.

Baltimore, Md.—Hospital.—Baldwin & Pennington have completed plans for an addition to St. Joseph's Hospital, to cost about \$50,000. Hydraulic passenger elevators and heating plants will be installed.

Baltimore, Md.—Dwellings.—Wilbur F. Stubbs will erect seven two-story dwellings; T. Milton Jones will erect thirteen two-story dwellings, and Henry Sauerhoff eleven two-story dwellings.

Baltimore, Md.—Hall.—Contract let to Geo. A. Blake for erection of two-story hall and school, 60x110 feet.

Charlotte, N. C.—College.—J. P. Monroe will erect a building for the North Carolina College.

Chattanooga, Tenn.—Parsonage.—A parsonage will be built. Address Rev. H. A. Klein.

Danville, Ky.—Dwellings.—Malcolm Weisiger will remodel several buildings for use as flats, and erect several new buildings.

Fort Worth, Texas—Business Building.—Winfield Scott will erect a store and office building.

Fulton, Ky.—Hotel.—Henry Knight will build a hotel.

Grafton, W. Va.—Mercantile Building.—Joseph Spidel & Co., of Wheeling, W. Va., will erect a large building in Grafton.

Harrisonburg, Va.—Courthouse.—The contract to the Witherow Lumber Co. for the erection of the new courthouse has been rescinded, and awarded to W. E. Spier, of Washington, D. C., at \$52,700.

Havre de Grace, Md.—School.—Contract has been awarded to E. S. Sentman at \$16,980 for erection of new schoolhouse.

Hyattsville, Md.—Power-house.—Contract for the erection of the Maryland & Columbian Railway power-house has been let to Henry Smith & Son, of Baltimore, at \$81,500; structure will be of brick, 205x130 feet, after plans by Henry Brauns.

Jackson, Miss.—College Buildings.—Mississippi College will erect additional building, to cost \$10,000, after plans by Mr. Sully, of New Orleans.

Jackson, Miss.—Dormitory.—Contract has been let to C. E. Mackey, of Vicksburg, Miss., for the erection of dormitory and blacksmith shop at \$5835.

Knoxville, Tenn.—Auditorium.—The Knoxville Fair Association proposes the erection of an auditorium, to seat 5000 people, at a cost of between \$4500 and \$6000.

Lakeville, Fla.—Depot.—The report that the Florida Central & Peninsular Railroad will build a depot at Lakeville is erroneous.

Macon, Ga.—Depot.—William E. Shaw, vice-president of the Georgia Southern & Florida Railroad, writes the Manufacturers' Record that there is no truth whatever in the report that his company has ordered plans for \$30,000 depot, as stated in this column last week.

Montgomery, Ala.—Temple.—Contract has been let to Thomas Purvis, of Birmingham, for the erection of the Masonic Temple at \$26,478.

New Orleans, La.—Dwelling.—P. W. Treleynan has permit to build frame cottage to cost \$2650.

Paducah, Ky.—Theatre.—A \$50,000 company has been organized to build an opera-house.

Richmond, Va.—College Buildings.—The trustees of Richmond College have arranged for the erection of dormitory building to cost \$30,000, and a hall to cost \$25,000.

Richmond, Va.—Hall.—Contract has been let to James Fox at \$45,777 for erection of Watts Hall, after plans by Charles H. Read.

Savannah, Ga.—Dwellings.—John Screven, Jr., H. A. Charlton, F. S. Lathrop, Horace

Rivers and others will each build residences at a cost of about \$3000.

Sistersville, W. Va.—Church.—The Presbyterian congregation will erect a new church. Address J. E. Kirk for information.

Spartanburg, S. C.—Jail.—Contract has been awarded to the Pauley Jail Building Co. at \$23,000 for erection of new jail.

Springfield, Carroll County, Md.—Asylum Buildings.—Wyatt & Nolting, of Baltimore, have completed plans for the new asylum buildings for the State. The structures will be grouped, heated by hot water, lighted by electricity, etc., and cover an area of 300 by 400 feet.

Swainsboro, Ga.—Warehouse.—S. G. Turner and George H. Tatum will build a fire-proof warehouse 50x70 feet.

Washington, D. C.—Permits issued to Mrs. Thomas Nelson Page for \$68,000 dwelling; to Thomas McGrath for \$27,000 dwelling; to Ida Geier for two store dwellings to cost \$7500; to C. M. Foulke for \$4500 addition.

Washington, D. C.—Dwellings, Church, etc. P. J. Pelz is preparing plans for a church for Trinity M. E. Church; A. P. Clark, Jr., has plans for apartment house for the Misses Burr, to cost \$50,000; N. T. Haller has plans for thirteen two-story houses, to be built by J. H. Meriwether, at cost of \$60,000; H. M. Earle, Brother & Co. will erect a \$6000 house at Chevy Chase for Mr. Scrammel; J. J. Apich will erect a dwelling after plans by C. A. Didden; A. Gilsell will erect dwelling after plans by C. A. Didden; A. B. Mullett & Co. have prepared plans for \$5000 dwelling.

Washington, D. C.—Dwellings.—George Keithley will erect \$2300 dwelling; Charles R. Pickford has permit for nineteen dwellings, to cost \$52,000, after plans by B. S. Simmons; A. B. Mullett & Co. have prepared plans for a dwelling, to cost \$5000; Appleton P. Clark, Jr., has prepared plans for an apartment house for the Misses Burr, to cost between \$40,000 and \$50,000.

Washington, D. C.—Public Buildings.—The District appropriations include \$22,000 for addition to Wallach School; eight-room building and site, \$30,000; reconstructing Anthony Bowen Building, \$30,000; construction of new High School building, \$50,000, and others. Address the building inspector.

Washington, D. C.—Hotel.—A Chicago paper states that Frank A. Hecht, of Chicago, has completed arrangements for the funds necessary to erect a \$2,000,000 hotel in Washington. Eastern and Western capital is interested, and the structure is to be located on the site of the present Willard Hotel. It will be twelve stories high, fire-proof, granite and marble, 800 rooms; have theatre, promenade and roof garden attached to accommodate 1500 people; will have a rotunda 65x185 feet, costing \$200,000; work to be commenced in 1897.

Westminster, Md.—Auditorium.—The trustees of Western Maryland College have authorized the erection of a \$20,000 auditorium.

Williamsburg, Va.—School.—The school board will contract for a school building.

RAILROAD CONSTRUCTION.

Steam Railways.

Ardmore, I. T.—It is stated that the road-bed of the Denison & Northern has now been completed to a point about thirty miles from Dougherty, I. T., and that fifty-four miles of rail have been purchased for a track. H. Hall is chief engineer of the line.

Baltimore, Md.—Twenty-four thousand tons of new steel rails have been ordered for the Baltimore & Ohio Railroad for relaying track. East of the Ohio river the rails laid will be 85-pound rails, while west of the Ohio they will be a little lighter. W. H. Greene, at Baltimore, is attending to this work.

Charleston, S. C.—It is reported that W. B. Strang, Jr., & Co., of 15 Wall street, New York, will begin work in a few days upon the proposed Charleston & Macon road. A. W. Swanitz, general manager of the New Orleans & Western road, has resigned his position to become chief engineer of the Charleston & Macon, and will superintend the construction work.

Clarksburg, W. Va.—It is reported that the general contract for building the New Martinsville & Clarksburg Railroad has been let to Contractor Bennett, of Athens county, Ohio, and that construction work is to begin immediately. The road will be about sixty-two miles in length, and it is understood that Prest. Henry G. Davis, also Richard C. Kerens and other directors of the West Virginia Central Railroad, are interested. T. M. Jackson, of Clarksburg, W. Va., is president of the company.

Commerce, Texas.—The extension of the

Texas Midland to Cooper will be completed about August 15. The road is nearly graded already. E. H. R. Green, at Terrell, Texas, is president of the line.

Cumberland, Md.—It is reported that the question of extending the West Virginia Central from Cumberland to Hagerstown has again been revived. The extension has been surveyed under the title of the Cumberland & Hagerstown Railroad, and contractors have examined it with a view of securing the work. Prest. Henry G. Davis, of the West Virginia Central, may be addressed at Elkins, W. Va.

Marksville, La.—It is reported that the St. Louis, Avoyelles & Southwestern Railroad, now under construction, will be extended north to connect with the St. Louis, Iron Mountain & Southern system at Columbia, La. Hugh J. Fitch has been appointed receiver of the road. F. M. Welch, of Marksville, is president.

Mineral Wells, Texas.—An effort is again being made to promote the Gulf, Brazos Valley & Northwestern scheme, which is to build a road from the Red river to the Gulf of Mexico. D. M. Howard and T. P. McEnnis, of Mineral Wells, are interested.

New Orleans, La.—The New Orleans & Northeastern Railroad Co. has determined to relay a portion of its road with 75-pound steel rails, and has already purchased enough for the first twelve miles. D. D. Curran, at New Orleans, La., is general superintendent.

Okolona, Miss.—It is reported that a company is being organized to build a railroad line from Okolona to Houston. The distance is about sixteen miles.

Orange, Texas.—The Kansas City, Shreveport & Gulf Company has begun work on the section near Orange. Grading contractors are now at work. This is a branch of the Kansas City, Pittsburg & Gulf system.

Union City, Tenn.—Business men of Union City are negotiating with the Illinois Central to build a branch from the Chesapeake, Ohio & Southwestern division to this point. Charles W. Miles is chairman of the committee, and D. M. Majors, secretary.

Electric Railways.

Baltimore, Md.—The Baltimore, Catonsville & Ellicott City Railway Co. has awarded contracts for the overhead electrical work on the line of the road from Howard and Saratoga streets to Calverton road. The contract for the iron poles was awarded to Thomas C. Basshor & Co., and the contract for the wires, hangers and other overhead work, as well as the erection of the poles, to the Maryland Manufacturing & Construction Co. The contract for the remainder of the overhead work—that on the section between Calverton road and Ellicott City—will be let in a few weeks. Henry T. Douglas, Equitable Building, is president.

Baltimore, Md.—The East Baltimore & Clifton Park Railroad Co. has been incorporated by Nelson Perlin, George C. Jenkins, William P. Harvey and others, to build an electric line along Eastern avenue, Wolf street and other portions of the Eastern part of the city. This road, if built, will be a branch of the City & Suburban system.

Chattanooga, Tenn.—It is reported that the Chattanooga Company contemplates building an electric line to Signal Mountain, in the suburbs. The distance is thirteen miles, and the cost would be \$300,000. T. J. Nichol is reported as interested.

Parkersburg, W. Va.—George A. Burt writes the Manufacturers' Record that the proposed electric line in Parkersburg will be seven miles long. Work is to begin at once. Mr. Burt may be addressed.

Savannah, Ga.—It is reported that another electric railway company is being organized to build a trolley line in the suburbs.

Sistersville, W. Va.—Engineers have begun a survey for a road from Sistersville to Clarksburg, on the Baltimore & Ohio, to be operated by the trolley system. New York parties, also H. C. Johnson & Co., of Pittsburgh, are said to be interested. The distance is about fifty miles.

Sistersville, W. Va.—It is stated that the proposed railroad line between Sistersville and Clarksburg, W. Va., is to be called the Sistersville Coal & Oil Electric Railroad. H. C. Johnson & Co., of Pittsburgh, Pa., are supposed to be interested in the matter, with New York parties.

Wellston, Mo.—The Wellston, Creve Cœur Lake & St. Charles Company has been incorporated, with a capital stock of \$2000, by Robert C. Schnecko, of Clayton, Mo.; J. B. C. Lucas, F. A. Thompson, T. T. Lucas, Charles P. Damon, G. R. Wise, J. H. Chambers, John H. Bobb and E. T. Thomas. The company is organized to build an electric railway from Wellston to St. Charles, with a branch touching Creve Cœur Lake.

Machinery, Proposals and supplies wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Barrel and Box Machinery.—See "Woodworking Machinery."

Boiler and Engine.—The Couch-Banks Manufacturing Co., Senola, Ga., wants to buy an eighty horse-power boiler and engine within thirty days; state price.

Boilers and Engines.—A. J. Herring, Tallahassee, Ala., wants to buy three engines and boilers.

Bridge.—Sealed bids will be opened July 8 for construction of a bridge; to have three spans, one of which must be thirty-five feet long, the other two thirty feet each. The length of said bridge is ninety-five feet, width of bridge twelve feet, two bents of wood 12x12 inches, five stringers 8x12 inches, thirty-five feet long; ten stringers 8x12 inches, thirty feet long; the floor of plank 2x6, twelve feet long. The bridge must be well swung, with iron rods to bolt the timbers together. All timbers must be post oak, white oak or mountain oak. Address C. J. Cornelson, ordinary, Jasper, Ga.

Building Material.—Charles C. Scott, Fitzgerald, Ga., wants catalogues of supplies of all kinds pertaining to the building business. Samples are also wanted, if prepaid.

Corn Mill.—C. W. Burleson & Son, Plumtree, N. C., want to buy a corn mill complete, ready for attaching to power.

Drills.—W. R. Mollard, Amelia C. H., Va., wants two or three Ingersoll-Sergeant steam drills in first-class second-hand condition. Give price, condition and length of time in use.

Elevator.—The Osborn Machinery Co., Clarksburg, W. Va., is in the market for a belt freight elevator of 2000 pounds capacity.

Excelsior Machinery.—J. B. Hamilton, Box 870, San Antonio, Texas, wants to correspond with manufacturers of excelsior machinery.

Flour-mill Machinery.—The Greer Machinery Co., Knoxville, Tenn., wants (dealers') prices on second-hand flour-mill machinery, either complete equipment or separate pieces.

Foundry Crane.—Thomas H. Johnson, care of Casey & Hedges Manufacturing Co., Chattanooga, Tenn., wants to buy a two-ton foundry crane of twenty-eight to thirty-two feet span; could use second-hand in good condition.

Furniture.—Rev. Fr. A. Boulton, Wheeling, W. Va., wants to correspond with makers of school furniture.

Furniture Manufacturers.—S. H. Griswold, Macon, Ga., wants to correspond with manufacturers of walnut furniture with a view of selling them walnut lumber.

Gas Engine.—The Osborn Machinery Co., Clarksburg, W. Va., is in the market for a twenty horse-power gas engine; second-hand in nearly new condition might answer.

General Machinery and Supplies.—Charles Sperry, M. E., St. Augustine, Fla., wants catalogues, prices and full particulars of improved furnaces and grates for bituminous coal, fuel economizers, feed-water heaters, filters and purifiers, steam and oil separators and extractors, water-meters for continuously measuring and recording the steam used in the various departments of electric, power and pumping stations, heating, laundry, etc.; cars for carrying coal from bin to boilers, and scales for weighing the same, so that a complete record can be obtained of the fuel, water, steam and power; indicators, planimeters, test gage and apparatus, electrical testing, measuring and recording instruments, and general supplies.

Grinding Mill.—H. B. Jones, Plum Tree, N. C., wants a mill for grinding mica dry.

Grist Mills.—A. J. Herring, Tallahassee, Ala., wants to buy two grist mills.

Heating Apparatus.—Rev. Fr. A. Boulton, Wheeling, W. Va., wants to correspond with makers of furnaces for heating (steam and hot water).

Hoisting Engine.—See "Mining Machinery."

Hoisting Machinery.—The Georgia Slate Co., Rockmart, Ga., expects to buy a steam hoist.

Ice Machine.—J. R. Collet, White Castle, La., wants to buy new or second-hand ice machine of five to ten tons capacity.

Lumber-plant Supplies.—Alf Truitt, Anniston, Ala., wants to correspond with some manufacturer of stump pullers.

Machine Tools.—S. Mays Ball, 340 Equitable Building, Atlanta, Ga., wants to buy a bolt and nut machine and a rolling-mill squeezer.

Mining Machinery.—The Garrison Coal Co., Garrison, Texas, wants to buy a twenty horse-power hoisting engine and other mining apparatus.

Power Machinery (for Boats).—The Hawkinsville & Deep Water Boat Line, J. P. Watson, manager, Hawkinsville, Ga., wants to contract for machinery for boat; vessel will be 100 feet long, twenty-two feet beam, hull four feet deep, and is to draw as little water as possible; engines should have seven inches diameter, with five-foot stroke, with boiler and single smokestack.

Railway Equipment.—The Ohio River Railroad Co., Parkersburg, W. Va., will be in the market for rails (about seven miles), rolling stock, etc., for street railway.

Railway Equipment.—George Peacock, Selma, Ala., wants several carloads of old car wheels.

Railway Velocipede.—S. Mays Ball, 340 Equitable Building, Atlanta, Ga., wants to buy a railway velocipede.

Rolling-mill Equipment.—See "Machine Tools."

Sausage Factory.—Jesse L. Gardner, Selma, Ala., Box 150, wants to buy equipment for sausage factory (without engine or boiler).

Saw Mills.—A. J. Herring, Tallahassee, Ala., wants to buy two saw mills, two planers and other machinery.

Slate Mill.—The Georgia Slate Co., Rockmart, Ga., wants machinery for slate mill.

Smoking-pipe Machinery.—The Novelty Machine Works, Owensboro, Ky., wants estimates on machinery for making corn-cob pipes.

Well-drilling.—Bids will be wanted for drilling fifteen artesian wells. Address the health officer of Washington, D. C.

Woodworking Machinery.—J. B. Hamilton, Box 870, San Antonio, Texas, wants to correspond with manufacturers of box and barrel machinery.

TRADE NOTES.

Hench & Dromgold, of York, Pa., report having a very large sale for the last six or eight months on saw mills, shipping them all over the United States, as well as quite a number to foreign countries. They have also been crowded with orders for spring-tooth harrows, cultivators, corn shellers, etc. Between 5000 and 6000 spring-tooth harrows were sold by this concern within the last five months.

The General Electric Co. has purchased the stock of the Southern Electrical Manufacturing & Supply Co., of New Orleans, La., succeeding to the business of that concern. The General Electric Co. will increase the stock of the Southern Company and extend the business in every way possible. Customers in Southern territory will thus be supplied more promptly and satisfactorily than ever from the New Orleans storeroom.

"The general design gives strength where it is most needed. The steel and material used in the manufacture are of the best quality, and the vises show excellence in their manufacture." Such is the award made by the World's Fair commissioners for the exhibit of wrought-steel vises made by the Van Wagoner & Williams Hardware Co., of Cleveland, Ohio. Diplomas and medals for other articles are expected by this concern.

The Brown Hoisting & Conveying Machine Co. has sold Messrs. E. D. Smith & Co., contractors, two of its standard 10-ton locomotive cranes. This equipment will be used on the work of extending the wheel pits of the Niagara Falls Power Co. to accommodate seven more 5000 horse-power turbines, which contract was recently awarded to Messrs. Smith & Co. They are fitted with extra large drums to take the great length of rope that will be required in hoisting out of the wheel pits.

Many strong letters of endorsement for its shop saws are received by the Q. & C. Co., Cincinnati, Ohio. A recent communication from the Haney & Campbell Co., Dubuque, Iowa, says: "The No. 2 Q. & C. shop saw

which we purchased from you some time ago has given us the very best of satisfaction. It has been a big saving to us in our shops, and we unhesitatingly recommend said machine to any parties having machine shops as a great labor and money saving device. We have saved, at least calculation, \$1 per day since having it in use."

Sprout, Waldron & Co., of Muncy, Pa., have recently received orders for corn ear crushers, corn shellers and meal sieves, etc., from the following parties: A. G. Webber & Co., Christiana, Del., No. 2 crusher; Gann, Bomler & Co., Lock Haven, Pa., No. 1 crusher and corn sheller; Frank L. Heath, Corry, Pa., No. 1 crusher; L. C. Hay, Martinsburg, Pa., No. 1 crusher; B. H. Hershey, Manheim, Pa., No. 1 crusher; Shaeffer, Merckel & Co., Fleetwood, Pa., No. 1 crusher; Murray & Shirey, Shawmut, Pa., No. 1 crusher; J. W. Creamer, Greenville, Pa., No. 1 crusher and elevator; H. E. Anderson, Cisco, Texas, No. 2 crusher and elevator; John W. Eichinger, New Cumberland, Pa., No. 2 crusher and elevator; S. A. Boyett, Grenada, Miss., cornmeal sieve; Cohn Bros., Lee, Miss., cornmeal sieve; Stimpson & Steele, Turnersburg, N. C., grain tester and exchange table; James Boyd, Harrisburg, Pa., No. 1 crusher and elevator; U. D. Heiser, Princeton, Ill., No. 1 crusher, meal sieve and bag truck.

Yachtsmen, fishermen and owners of other sailing craft are showing considerable interest in a recently improved type of anchor. It is known as "Babbitt's" improved anchor, and has two flukes, which always hold, instead of one. This anchor has a peculiarly constructed head, so that if the anchor falls on the side, the slightest pull on the cable causes it to immediately capsize, thus bringing both flukes into position to hold. This is of great importance when laying at anchor and swinging around in the tide, as the flukes may pull out in swinging about, but the head will cause the flukes to come into position and bury at once, without any possibility of fouling or dragging. The American Ship Windlass Co., Providence, R. I., sole manufacturer of this anchor, is receiving strong approval of its usefulness. Lindon W. Bates, of Chicago, writes: "After a thorough trial of your anchors on the dredge Beta, on the Mississippi river, I am pleased to testify to their great superiority over any others we used." S. R. Burleigh, Providence, R. I., writes: "Will you ship me as soon as possible one of your 20-pound Babbitt anchors. I have a 30-pounder, which held me in an exposed place at Sakonnet through the gales of three years ago, but it is rather heavy for every-day use. It has the most hold for its weight and is the most convenient of anything I have seen."

We are in receipt of a sample of the Buchel Brush Co.'s product. This is a new concern which has just started the manufacture of wire brushes at New Orleans, La. It uses machinery invented by J. Buchel & Bro., which turns out perfectly finished brushes with wonderful rapidity. The inventors state that a single machine will turn out automatically and ready for the market 140 standard casting-cleaning brushes every hour, or 1400 every day of ten hours, during which time it will consume 1000 pounds of flat, tempered steel wire, representing an aggregate of 300,000 lineal feet, or a length sufficient to span a distance somewhat over fifty statute miles. To turn out this large amount of work the machine has to insert wires at the rate of twenty per second, or 1200 per minute (72,000 per hour). 720,000 per day of ten hours, during which time the wire runs through the machine at the rate of 500 feet per minute, or 30,000 feet per hour. In making brushes the machine itself does not operate at anything like 1200 strokes per minute, because it inserts simultaneously twelve wires at every stroke, and therefore has only to make 100 strokes every minute to operate at its full rated capacity. The casting-cleaning brush is a very useful and practically indispensable article to all molders and foundries generally, though it is not strictly confined or limited to this line of business, since it is used by so many street-car companies for attachment underneath their car trucks for brushing the rails, and by masons, contractors and others for brushing and cleaning bricks, stone and any other material demanding a brush of this kind, and in an enlarged form for street brooms, brushes, sweepers, etc.

A notable example of the products of a Southern concern is to be seen at Grace Church, near Cobham, Va. This edifice contains a group of memorial windows whose artistic design and treatment have called forth warm praise from qualified critics. They were planned and made by the Hefferman Stained Glass Works, Lynchburg, Va. A description of these windows will be of interest: The large windows on each side

are of a geometrical design, having harmonizing shades of cathedral amber glass, relieved at top and bottom by a renaissance scroll work of pale blue opalescent glass. At the springing line are double wrought-iron ventilators, operated by cords at the window-sill. A memorial window represents "Eternal Life," having annunciation lilies on a background of opalescent hue, shaded from a dark gray tint at the base to a soft dove color in ascending. At the base of the window is a rich ornamental series of renaissance scroll work in veined amber, opalescent, tinged with ruby, surmounted by bands running across the window; on these bands are placed Egyptian vases of rare forms and shading, studded with bands of cut rubies, sparkling as stars. From these vases the lilies and foliage spring upward, in graceful forms, vying with nature in perfection. Above they are met by ornamental scroll drops in richly variegated amber, dashed with ruby, and above these are two emblems, an open Bible and a golden chalice. Coloring and design are made to harmonize by a soft golden tint. Two other memorial windows contain annunciation lilies and palm branches, with onyx and agate columns of composite order on each side and a pearl background set with rubies, below which are rocco ornaments incrustured with jeweled mosaic work. Crimson and golden panels at foot of windows are marked with jewels in festoons, surmounted by bands of sparkling gems. Two windows are in onyx and agate columns, with amethyst background inlaid with arabesque design, having a jeweled crown and the monogram I. H. S. on the western window, and a cross with the monogram A. O. on the eastern one, both monograms being in oval form upon a granite crimson background.

TRADE LITERATURE.

An improved line of engine lathes is described and illustrated in a pamphlet issued by the Lodge & Shipley Machine Tool Co., Cincinnati, Ohio. These lathes contain several features which increase the quantity and quality of the work produced.

"Goulds" pumps have an established reputation for efficiency, and the perfection of mechanical details reached in their construction gives an imposing appearance to the finished machine. Various styles of these pumps are illustrated in a calendar running from June, 1896, to January, 1897, which is sent out by the Goulds Manufacturing Co., Seneca Falls, N. Y.

A pamphlet describing the "Lightning" water heater is issued by the manufacturer, the Horix Manufacturing Co., Cleveland, Ohio. With this heater an unfailing supply of hot water is obtained without the discomforts of a furnace. An advantage of this heater is that practically all the heat is utilized in heating the water. None escapes into the room, and no hot water is stored in the cylinder. It is simple in construction and of attractive appearance.

A price-list issued by the Rome Brass & Copper Co., Rome, N. Y., gives quotations on a variety of brass, copper and miscellaneous metal goods. Roll and sheet, slitting, sawed and scrap, wire in coils, rods, spooling wire, tubing and moldings are quoted in brass goods. Hot-rolled sheet, tinning, nickel-plated, bottoms, cornice, plain cold-rolled and planished ware are in the list of copper goods. Tacks, nails, washers, ferules, etc., are quoted in miscellaneous goods.

Sheet metal is susceptible to many uses for building purposes, and a catalogue briefly illustrating such applications is issued by the Philadelphia Steel Roofing Co., 514, 516, 518 Beach street, Philadelphia. This company manufactures an extensive variety of steel roofing, siding, fire-proof lath, steel brick, etc. Its products are in line with the growing demand for artistic effect, combined with durability and strength. A long experience, well-equipped works and superior facilities enable it to quickly handle special as well as general orders.

The popular use of compressed air today testifies to a wonderful growth during a comparatively short time. This is due primarily to a better understanding of its great usefulness for power purposes, the abatement of general and undefined charges of non-economy, and the possibility, through the energy and foresight of leading manufacturers, to obtain air compressors suitable for any and every duty. Among the many uses for compressed air and constantly increasing demands for it, the wide field of hydrostatics offers many occasions where the application of the power is especially adapted. In a line of work generally known as the air-lift system of pumping, compressed air has demonstrated its efficiency

and established a permanent place in hydraulic and pneumatic engineering. The features of this method of pumping are its simplicity and economy. A pamphlet issued by the Pneumatic Engineering Co., 100 Broadway, New York city, gives some noteworthy examples of remarkable work accomplished by the apparatus made by this concern.

A circular describing the Vanduzen steam jet pump is being sent out by the E. W. Vanduzen Co., Cincinnati, Ohio. These pumps have become widely known, which the records of their performances show is justified by the superior advantages they possess. They are now used for pumping over forty different liquids. A blower pump for pumping or cleaning rooms, cellars and mines of gases, foul air, fumes, etc., and for creating a circulating air current, draft under boilers and prevention of smoke, is strongly endorsed by users. Simplicity, durability and effectiveness are the features aimed for in the construction of these pumps, and the success achieved is reflected by the increasing volume of the company's business.

The Metesser gas producer regenerative furnace, for the consumption of low grade fuels, is described in a pamphlet issued by Lewis Metesser, New Orleans, La. Remarkable claims are made for this furnace, and the results show that they are well founded. Of this furnace it is claimed that it will successfully burn anything that is suitable for fuel; produce complete combustion, and prevent formation of objectionable smoke; evaporate, when operated with high grade boilers, more water at same cost than by any other system, and to produce dry steam; that the furnace will be operated with less accumulation of soot and ashes on boiler than in any other combination; that the plant may without detriment be forced to a greater increase above rating than any other; that all workmanship and material is first-class and durable, rendering unnecessary the usual expensive repairs, and first cost less than any other practical apparatus for same use; that the entire arrangement is simple in design and construction, and easily operated with minimum amount of labor. This furnace is suitable for burning fire-brick, face brick, terra cotta, floor tile, stoneware and porcelain; also for reverberatory and other patterns of smelting furnaces. Styles of this furnace are also made that are designed and proportioned for the use of waste and bulky fuels, such as bagasse, sawdust, rice hulls, lignite and low grade coal, arranged for firing by hand or automatically through hopper, separately or together, as may be required. The advantages of this furnace combined with a Cahall boiler are also described in a separate pamphlet.

A cursory examination ordinarily suffices for the mass of literature issued by manufacturers to explain or exploit their goods. Occasionally a pamphlet comes along prepared in such good taste as to detain a busy man's attention until he has digested its contents. It is a common occurrence for a really meritorious product to be ignored because of a dull and verbose attempt to explain its features. Literature of this class can be made to have a value of considerable duration. One of the best examples of this is shown by a pamphlet recently issued by the Snow Steam Pump Works, of Buffalo, N. Y. This publication is more than interesting; it is entertaining. It tells the story of the evolution which has taken place in the methods of supplying water. Comparisons that are presented show the marvels produced by mechanical and inventive genius. The tilting beam and the "old moss-covered bucket" of early history brings out with strong effect the steam-moved bucket, plunger and swinging valves of the up-to-date steam pump. With its rustic environment the town pump is superseded by the less romantic but more powerful steam pump. A picturesque stream, with clear water rippling over its stony bed, and dancing on its way to the sea, loses none of its charms from the fact that under the shadow of the hillside pines is sheltered a pumping engine. Located within a beautiful room, whose varnished floor of quartered oak and tinted walls illustrate the care and pride of those whose duty it is to keep both house and engine at its best, this triple-expansion, direct-acting pumping engine with easy stride and graceful motion overcomes physical laws and directs to the nearby city the pent-up waters of the adjacent stream. Finely-executed engravings lend graphic force to the text of this pamphlet. An acquaintance with the latest triumphs in this class of machinery is offered through its pages, and the wonderful advancement that has been made is reflected in a striking manner.

Why the South Grows.

The development of the South as a field for investment has been treated upon in several recent issues of this paper, and the articles have elicited inquiries as to the foundation for the belief expressed therein, that the future of the South was fraught with promise of a phenomenal growth within the next few years. We are glad to know that thinking people are beginning to investigate the possibilities that lie in this direction, and furthermore believe that the most rigid inquiry will only confirm the vague impressions already held concerning the productive section lying below Mason and Dixon's line. To furnish in detail reasons why the South should make material industrial advances would require more space than can well be spared here. But aside from the tangible evidences existing in the shape of new cotton mills, new iron and steel industries, and the certain reflection of abundant prosperity displayed in the many municipal improvements now under way in nearly every town in the South, there are reasons equally weighty for the assertion that these are but the forerunners of a steady growth in all lines of human progress in that section. In the first place, the South is under an era which could not have existed prior to the war. It invites development, and its corollary advantages in the way of climate and natural resources add to the weight of its invitation.

It is not generally known that the largest percentage of native-born population today is found in the South. It has been overlooked in the mad rush which made the growth of the West the wonder of the world, but now that capital does not regard with favor the increasing sentiment against it in that region, it is bound to turn to safer and more congenial channels. In the South it will encounter none of the adverse features to which it has been subjected elsewhere. It finds firmly established government, and a respect for law and order, since the outbreaks of violence toward criminals are but sporadic, and are not directed against property—and above these inducements it finds ample opportunity for profit. The natural resources of the South are enormous, and the opportunities for converting its products into finished materials are not equalled in any other portion of the country. The climate is so equable in character that living expenses are less than in the North, while at the same time the standard of living is actually raised. The natural inference is, therefore, that well-paid, contented labor will be the rule, and the disastrous strikes which have interrupted the peaceful progress of our Northern industrial centres will not be met with in constantly recurring periods. We have already seen that the South can compete successfully with the North in almost any branch of manufacturing, and that the advantages on its side are so great that the removal of certain manufacturing establishments to this more favored spot is already assuming formidable proportions. There is an evidence of permanency about this more recent migration that has been lacking heretofore, and it augurs well for the future.—New York Financier.

Expert Train Running.

For the month of May the record of train movement on the B. & O. R. R. eclipsed the record-breaking record for April, when the passenger trains arrived at their destinations as per schedule ninety-five times out of a possible hundred. The B. & O. fast freight trains between New York, Philadelphia and Baltimore on the east, and Cincinnati, St. Louis and Chicago on the west, are being moved with an equal degree of precision.

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Christian Endeavor Convention, Washington, July 7-13.

For this occasion the Pennsylvania Railroad Co. will sell excursion tickets from Baltimore to Washington at \$1.25 for round trip, July 7-13, good to return July 14, inclusive.

Friday and Saturday Excursions to the Seashore via Pennsylvania Railroad.

Commencing June 5 and continuing each Friday and Saturday until August 29, inclusive, excursion tickets will be sold from Baltimore to Atlantic City, Cape May and Sea Isle City for trains leaving Union Station 10.55 A. M. and 12.05 noon at the low rate of \$4 for the round trip, including transfer of passenger through Philadelphia in each direction. Tickets good for return until following Tuesday, inclusive, and permitting stop-off at Philadelphia without limit on return trip.

Steam Yachts and Marine Machinery
Built by Marine Iron Works, Clybourn and Southport avenues, Chicago. Free illustrated catalogue. Write them for it. †

High Telephone Rentals

May be avoided by using our City Telephone Exchange System; many in use, also Factory and Short Line Systems complete. Write us, Scott Bros. Electric Co., Detroit, Mich. ‡

Opening of the Mountain House, Cresson Springs, and Stopping of all Express Trains at Cresson.

The Pennsylvania Railroad Co. announces that on and after Thursday, June 25, 1896, all trains will stop at Cresson. The Pennsylvania Limited will stop only when there are passengers to get on or off at that point. The Mountain House will be opened on that day.

Commencing the same day, observation cars will be attached to the Pacific Express west and the Day Express east for the trip over the mountains.

Reduced Rates to Chicago.

Account of the Democratic National Convention, Chicago, Ill., the B. & O. R. R. will sell excursion tickets from all ticket stations on its lines east of the Ohio river, for all trans July 3, 4, 5 and 6, good for return passage until July 12, inclusive, at one single fare for the round trip.

Tickets will also be sold by all connecting lines.

The B. & O. maintains a double daily service of fast vestibuled express trains, with Pullman sleeping and dining cars attached, running through to Chicago solid without change or transfer.

THE MOUNTAIN CHAUTAUQUA.

Mountain Lake Park, Md., on the Main Line of the Picturesque B. & O.

The most superb and sensible summer resort in America; \$300,000 expended in improvements; 200 beautiful cottages; hotel and cottage board at from \$5 to \$12 per week—cheaper than staying at home; the mountain air and the mountain views simply indescribable; session August 5th to the 25th; three superb entertainments daily; the best music and the best lecturers which money can procure; Dr. T. De Witt Talmage, Gen. John B. Gordon and Bishop J. H. Vincent already secured, with 100 others; Dr. W. L. Davidson, the great Chautauqua manager, in charge.

Summer Schools.—Twenty departments of important school work in charge of leading instructors from the prominent universities; a wonderful chance for teachers and students desiring to make up studies; tuition insignificant; wishes of students gratified; low rates on railroads. For full detailed information and illustrated programme, address A. R. Sperry, Mountain Lake Park, Md.

Personally-Conducted Tours via Pennsylvania Railroad.

That the public have come to recognize the fact that the best and most convenient method of pleasure travel is to participate in the Pennsylvania Railroad Co.'s personally-conducted tours, is evidenced by their increased popularity with each succeeding year and the number of inquiries in regard to them.

Under this system the lowest rates are obtained, both for transportation and hotel accommodation, and none but the best hotels are used. An experienced tourist agent and chaperon accompany each tour to look after the comfort of the passenger.

The following tours have been arranged for the season of 1896:

To the North (including Watkins Glen, Niagara Falls, Thousand Islands, Montreal, Quebec, Au Sable Chasm, Lakes Champlain and George, Saratoga, and a daylight ride down through the Highlands of the Hudson), July 21 and August 18. Rate, \$100 for the round trip from Philadelphia, Baltimore and Washington, covering all expenses of a two weeks' trip.

To Yellowstone Park, covering a period of seventeen days, on a special train of Pullman sleeping, compartment and observation cars and dining car, August 27. Rate, \$200 from Philadelphia, Baltimore and Washington.

To Niagara Falls, excursion tickets good to return within ten days will be sold on July 23, August 6 and 20, September 5 and 17, at rate of \$10 from Philadelphia, Baltimore and Washington. These tickets include transportation only.

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Adams & Price L. & M. Works. 37	Bailey-Lebby Co. 36	Cameron, A. S., Steam Pump Wks. 34	Dallett & Co. 24	Easton & Burnham Machine Co. 31	Fay, J. A., & Egan Co. 28	Garrett, C. S., & Son. 27	Hailes & Ballinger. 6	Indiana Machine Works. 29	Jamieson Fire-Resisting Paint Co. 27	Keeler, E., Co. 9	Land Trust Co. of Georgia. 22	Makepeace, C. R., & Co. 6	Mason Machine Works. 31	Mayer, Andrew. 39	Patrick & Carter Co. 19	Queen City Printing Ink Co. 8	Record Printing House. 1	Rumsey & Co., Ltd. 34	Salmen Brick & Lumber Co. 24	Union Elevator & Machine Co. 37	Wais & Roos Punch & Shear Co. 23	Y. 1	Z. 1	Z. 1	
Ahrens & Ott Mfg. Co. 17	Bailey, John T., & Co. 20	Cameron & Barkley Co. 36	Davis, G. M., & Son. *	Eccles, S., Jr. 25	Fay Manilla Roofing Co. 26	Gas Engine & Power Co. 2	Hall, J. R. 1	Ingersoll-Sergeant Drill Co. 20	Jeffrey Mfg. Co. 26	Kensington Engine Works. *	Lane Manufacturing Co. 29	Malone & Bell. 21	Maxwell-Mason Tele. Mfg. Co. 39	McClave, Br. & Co. 9	Pattapso Rubber Co. 10	Queen City Supply Co. 16	Reeder, John S. 27	Ryther Mfg. Co. 9	Saunders, John. 6	Union Foundry & Machine Works. 37	Walker & Elliott. 37	Y. 1	Z. 1	Z. 1	
Aiken, Wm. Martin. 22	Ball, Geo. C., & Co. 24	Campbell & Zell Co. 15	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	Gedge Bros. Iron Roofing Co. 27	Hartford, Wm. T. 6	International Corres. Schools. 6	Jenkins Bros. 40	Kilbourne & Jacobs Mfg. Co. 40	Law, Samuel, & Sons, Limited. 30	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
Akron Belting Co. 10	Ball Engine Co. 14	Canton Steel Roofing Co. 27	Davis, G. M., & Son. *	Eisenbrandt Cycle Co. 6	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
Albino, E. D., Co. 24	Barber Asphalt Paving Co. 31	Carter, Wm. M., & Co. 6	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
Allfree, J. B., Mfg. Co. 14	Barnes, W. F. & John, Co. 12	Carter, Wm. M., & Co. 6	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
Allison Coupon Co. 24	Barnett, G. & H., Co. 40	Carter, Wm. M., & Co. 6	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
Alsing, J. R., Co. 36	Barrett, S. E., Mfg. Co. 27	Carter, Wm. M., & Co. 6	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
American Bonding & Trust Co. 21	Battle Creek Steam Pump Co. 34	Carter, Wm. M., & Co. 6	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
American Cotton Oil Co. 32	Bay Line. 33	Carter, Wm. M., & Co. 6	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
American Engine Co. 16	Beach, H. L. *	Carter, Wm. M., & Co. 6	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
American Imp. Anti-Frict. Met. Co. 13	Beckley, A. J., & Co. 36	Carter, Wm. M., & Co. 6	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
American Ship Windlass Co. 4	Berthach & Co. 27	Carter, Wm. M., & Co. 6	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
American Supply Co. *	Besly, Chas. H., & Co. 40	Carter, Wm. M., & Co. 6	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
American Well Works. 35	Bethlehem Foundry & Machine Co. 27	Carter, Wm. M., & Co. 6	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
American Wood Preserving Co. 20	Bethlehem Iron Co. *	Carter, Wm. M., & Co. 6	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
Ames Iron Works. 14	Big Four Route. 33	Carter, Wm. M., & Co. 6	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
Aragon Hotel. 33	Bing, J. Howard. 17	Carter, Wm. M., & Co. 6	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
Arctic Machine Manufacturing Co. 19	Bird, Wm. M., & Co. 6	Carter, Wm. M., & Co. 6	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
Armstrong-Herschell Co. 4	Birmingham Boiler Works. 9	Carter, Wm. M., & Co. 6	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
Armstrong, Robt. S., & Bro. 23	Black Mfg. Co. 39	Carter, Wm. M., & Co. 6	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
Asbrand, C. W. 26	Blake, Geo. F., Mfg. Co. *	Carter, Wm. M., & Co. 6	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
Atkins, E. C., & Co. 28	Blakeslee Mfg. Co. 34	Carter, Wm. M., & Co. 6	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
Atkins, Jos. L. 9	Block-Pollak Iron Co. 24	Carter, Wm. M., & Co. 6	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
Atlanta Terra Cotta Co. 8	Blue Ridge Cement & Lime Co. 6	Carter, Wm. M., & Co. 6	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
Austin, F. C., Mfg. Co. 37	Boomer & Boschert Press Co. 21	Carter, Wm. M., & Co. 6	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
	Boston Belting Co. 10	Carter, Wm. M., & Co. 6	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	
	Bradford Mill Co. 12	Carter, Wm. M., & Co. 6	Davis, G. M., & Son. *	Edinburg Foundry & Machine Co. 29	Fleming Mfg. Co. 37	General Electric Co. 38, 39	Holmes, E. & B., Machinery Co. 29	International Corres. Schools. 6	Jewell Belting Co. 11	Kilburn, Lincoln & Co. 30	Lawrence Cement Co. 20	Mann & Co. 9	McGregor & Jackson Boiler Wks. 35	McKee, H. L. 23	Paxson, J. W., & Co. 9	Queen City Supply Co. 16	Reliance Gauge Co. 15	Schierens, Chas. A., & Co. 2	Schwarzenberg Bros. & Co. 23	Union Iron Works Co. 24	Warner Elevator Mfg. Co. 37	Y. 1	Z. 1	Z. 1	